

**SAN JOAQUIN VALLEY  
AIR POLLUTION CONTROL DISTRICT  
AES Delano Incorporated**

**FINAL ENGINEERING EVALUATION  
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# **TITLE V APPLICATION REVIEW**

Project #: 961140

Deemed Complete: December 5, 1996

Engineer: Chay Thao

Date: December 4, 2002

Facility Number: S-75  
Facility Name: AES Delano Inc.  
Mailing Address: PO Box 550  
Delano, CA 93216

Contact Name: Wayne Amer  
Phone: (661) 792-3067

Responsible Official: John Jensen  
Title: Plant Manager

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## **I. PROPOSAL**

AES Delano Inc. (Delano Energy) is proposing that the initial Title V Operating Permit be issued for its existing biomass fired cogeneration facility in Delano. The purpose of this engineering evaluation is to identify all applicable requirements, determine if the facility will comply with those applicable requirements, and to provide the legal and factual basis for the proposed permit conditions.

## **II. FACILITY LOCATION**

Delano Energy is located at 31500 Pond Road and Highway 99 in Delano, California.

## **III. EQUIPMENT LISTING**

A detailed facility printout listing all permitted equipment at the facility is shown in Attachment A.

A summary of the exempt equipment categories which describe the insignificant activities or equipment at the facility not requiring a permit is shown in Attachment B. This equipment is not exempt from facility-wide requirements.

## **IV. GENERAL PERMIT TEMPLATE USAGE**

The applicant has not requested to utilize any model general permit templates.

## **V. SCOPE OF EPA AND PUBLIC REVIEW**

The applicant has not requested to utilize any model general permit templates. Therefore, the proposed permit in its entirety is subject to EPA and public review.

## **VI. APPLICABLE REQUIREMENTS ADDRESSED BY GENERAL PERMIT TEMPLATES**

The applicant has not requested to utilize any model general permit templates. All applicable requirements are explicitly addressed in the permit outside of the general permit templates.

## **VII. APPLICABLE REQUIREMENTS NOT ADDRESSED BY GENERAL PERMIT TEMPLATES**

District Rule 1080 Stack Monitoring (Amended 12/17/92) (Non SIP replacement for Kern County Rule 108.0)

District Rule 1081 Source Sampling (Amended 12/16/93) (Non SIP replacement for Kern County Rule 108.1)

District Rule 1100 - Equipment Breakdown (Amended 12/17/92) (Non SIP replacement for Kern County Rule 110)

District Rule 1160 - Emission Statements (Adopted 11/18/92)

District Rule 2010 - Permits Required (Amended 12/17/92) (Non SIP replacement for Kern County Rule 201)

District Rule 2020 - Exemptions (Amended 3/21/02) (Non SIP replacement for Kern County Rule 202)

District Rule 2031 - Transfer of Permits (Amended 12/17/92) (Non SIP replacement for Kern County Rule 203)

District Rule 2040 - Applications (Amended 12/17/92)

District Rule 2070 - Standards for Granting Applications (Amended 12/17/92) (Non SIP replacement for Kern County Rule 208)

District Rule 2080 - Conditional Approval (Amended 12/17/92) (Non SIP replacement for Kern County Rule 209)

District Rule 2520 - Federally Mandated Operating Permits, Sections 5.2, 9.1.1, 9.4, 9.5, 9.7, 9.8, 9.9, 9.13.1, 9.13.2, 9.16 and 10.0 (Amended 6/21/01)

District Rule 2520 Federally Mandated Operating Permits - Section 9.3.2 (Amended 6/21/01)

District Rule 4101 - Visible Emissions (Amended 11/15/01)

District Rule 4201 - Particulate Matter Concentration (Amended 12/17/92)

District Rule 4202 – Particulate Matter Emission Rate (Amended 12/17/92)

District Rule 4301 – Fuel Burning Equipment (Amended 12/17/92)

District Rule 4352 - Solid Fuel Fired Boilers, Steam Generators, and Process Heaters (Amended October 19, 1995)

District Rule 4601 - Architectural Coatings (Amended 10/31/01)

District Rule 4801 Sulfur Compounds (Amended 12/17/92) (Non SIP replacement for Kern County Rule 406)

District Rule 8021, 8031, 8041, 8051, 8061, and 8071 - Fugitive Dust (PM<sub>10</sub>) Emissions (Amended 11/15/01)

40 CFR Part 52.21, Prevention of Significant Deterioration (PSD)

40 CFR Part 60, Subpart Db Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units

40 CFR Part 61 - Subpart M, National Emission Standard for Asbestos

40 CFR Part 68, Chemical Accident Prevention Provisions

40 CFR Part 82, Subpart F - Stratospheric Ozone

District New and Modified Stationary Source Review Rule

## VIII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

For each Title V source, the District issues a single permit that contains the Federally Enforceable requirements, as well as the District-only requirements. The District-only requirements are not a part of the Title V Operating Permit. The terms and conditions that are part of the facility's Title V permit are designated as "Federally Enforceable Through the Title V Permit".

The facility is subject to the following District rule that is not currently Federally Enforceable:

- District Rule 4102 - Nuisance (Amended December 17, 1992)

For this facility, the following conditions are based on the rule identified above and is not Federally Enforceable Through the Title V Permit:

| Permit Unit | Condition  |
|-------------|------------|
| -0-1        | 41, 42     |
| -2-4        | 42         |
| -11-12      | 16, 43, 44 |

## IX. COMPLIANCE

### 1. District Rule 1080 – Stack Monitoring

District Rule 1080 has been submitted to the EPA to replace Fresno County APCD Rule 108 that is in the SIP. As shown on Table 1, District Rule 1080 is more stringent than Kern County Rule 108.

**Table 1 - Comparison of District Rule 1080 and Kern County Rule 108**

| REQUIREMENT   | District 1080 | Kern 108 |
|---|---------------|----------|
| Continuous emission monitors shall be capable of monitoring NO <sub>x</sub> levels to within 20% with confidence levels of 95%.   |               | ✓        |
| Continuous NO <sub>x</sub> monitors shall meet the applicable performance specifications in 40 CFR 51, App. P and 40 CFR 60, App. B, or equivalent as established by mutual agreement of the District, CARB, and EPA. | ✓             |          |
| Breakdowns must be reported within 48 hours, unless the source can prove that a longer period was necessary.  | ✓<br>(8 hrs)  | ✓        |
| The District must be notified within 24 hours prior to shutdown of monitoring equipment for maintenance.  | ✓             | ✓        |
| Violations of any emissions standards of these rules, as shown by the stack monitoring equipment, must be reported within 96 hours.   | ✓             | ✓        |
| Quarterly reports are required.   | ✓             | ✓        |
| Records from the monitoring equipment shall be kept for at least two years.   | ✓             | ✓        |

The requirements from Rule 1080 are in the conditions of the following permit units:

| Permit Unit | Condition |
|-------------|-----------|
| -6-15       | 43 and 54 |
| -11-12      | 42 and 52 |

## 2. District Rule 1081 – Source Sampling

- a. Fuel Receiving, Screening, and Conveying #1 (S-75-1-4); Fuel Receiving, Screening, and Conveying #2 (S-75-2-4); Fuel Reclamation, Conveying and Screening (S-75-5-3); 400 MMBtu/hr Biomass Fired Boiler #1 (S-75-6-15); Ash Storage Silo (S-75-7-3); Fuel Receiving, Screening and Conveying (S-75-9-4); Fuel Reclamation, Conveying and Screening Phase II (S-75-10-4); 315 MMBtu/hr Biomass Fired Boiler #2 (S-75-11-12); Limestone Storage Silo #2 (S-75-12-2); Sand Storage Silo #2 (S-75-13-3); Diesel Fired Engines (S-75-16-1, -17-1 and -18-1)

District Rule 1081 has been submitted to the EPA to replace Kern County Rule 108.1 that is in the SIP. The following table lists all of the applicable requirements of District Rule 1081 and shows that District Rule 1081 is more stringent than Kern County Rule 108.1. Compliance with District Rule 1081 will insure compliance with Kern County Rule 108.1.

**Table 2. Comparison of District Rule 1081 and Kern County Rule 108.1**

| REQUIREMENTS   | District Rule 1081 | Kern Rule 108.1 |
|--|--------------------|-----------------|
| Upon request of the APCO, the source shall provide information. And records to enable the APCO to determine when a representative sample can be taken.   | ✓                  | ✓               |
| The facility shall collect, have collected or allow the APCO to collect a source sample.   | ✓                  | ✓               |
| The source shall have District personnel present at a source test.   | ✓                  |                 |
| The applicable test method, if not specified in the rule, shall be conducted in accordance with 40 CFR § 60, Appendix A.   | ✓                  |                 |
| Test procedures: 1) arithmetic mean of three runs, 2) a scheduled source test may not be discontinued solely due to the failure to meet the applicable standard(s), and 3) arithmetic mean of two runs is acceptable if circumstances beyond owner or operator control occurs. | ✓                  |                 |

Sections 3.0, 4.0, 5.0, 6.0, and 7.0 set forth requirements for sampling facilities, collection of samples, test methods, test procedures, and administrative requirements, respectively. These requirements are in the conditions of the following permit units:

| Permit Unit | Condition      |
|-------------|----------------|
| -0-1        | 45             |
| -1-4        | 23             |
| -2-4        | 23             |
| -5-3        | 16             |
| -6-15       | 8, 9, 46, 49   |
| -7-3        | 14             |
| -9-4        | 24, 27, 47, 48 |
| -10-4       | 23, 33, 34     |
| -11-12      | 8, 9, 45, 47   |
| -12-2       | 9,10           |
| -13-2       | 9,10           |
| -16-1       | 7              |
| -17-1       | 7              |
| -18-1       | 7              |

### 3. District Rule 1100 – Equipment Breakdown

Sections 6.0 and 7.0 prescribe breakdown procedures and reporting requirements. These requirements are addressed by conditions 1, 2, and 11 of the requirements for permit unit –0-1. District Rule 1100 has been submitted to the EPA to replace Kern County Rule 111. District Rule 1100 is at least as stringent as the county SIP rules addressing breakdowns, as shown in Table 3.

**Table 3. Comparison of District Rule 1100 to Kern County Rule 111**

| REQUIREMENTS   | District Rule 1100 | Kern County Rule 111     |
|--|--------------------|--------------------------|
| A breakdown occurrence must be reported as soon as reasonably possible but no later than 1 hour after detection.   | ✓                  | ✓<br>(Kern allows 2 hrs) |
| A variance must be obtained if the occurrence will last longer than a production run or 24 hours, whichever is shorter (96 hours for CEM systems).                   | ✓                  | ✓                        |
| A report must be submitted to the APCO within 10 days of the correction of the breakdown occurrence which includes:  | ✓                  | ✓                        |
| 1) A statement that the breakdown condition has been corrected, together with the date of correction and proof of compliance.  | ✓                  | ✓                        |
| 2) A specific statement of the reason(s) or cause(s) for the occurrence sufficient to enable the APCO to determine whether the occurrence was a breakdown condition. | ✓                  | ✓                        |
| 3) A description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future.  | ✓                  | ✓                        |
| 4) Pictures of the equipment or controls which failed if available.  | ✓                  | ✓                        |

### 4. District Rule 1160 – Emission Statements

Section 5.0 requires the owner or operator of any stationary source to provide the District with a written emissions statement showing actual emissions of reactive organic gases (ROGs) and nitrogen oxides (NOx) from that source. The District waives this requirement for sources emitting less than 25 tons per year of these pollutants if the District provides the Air Resources Board (ARB) with an emissions inventory of sources emitting greater than 10 tons per year of NOx or ROGs based on the use of emission factors acceptable to the ARB. Condition 3 of the facility-wide requirements (S-75-0-1) assures compliance with this rule.



5. District Rules 2010 and 2020 – (Permits Required & Exemptions)

District Rule 2010 sections 3.0 and 4.0 require any person building, modifying or replacing any operation that may cause the issuance of air contaminants to apply for an Authority to Construct (ATC) from the District in advance. The ATC will remain in effect until the Permit to Operate (PTO) is granted. Condition 4 of the facility-wide requirements (S-75-0-1) assures compliance with this rule.

District Rule 2020 lists equipment which are specifically exempt from obtaining permits and specifies recordkeeping requirements to verify such exemptions. Condition 4 of the facility-wide requirements (S-75-0-1) assures compliance with this rule.

**Table 4. Comparison of District Rule 2020 (9/17/98) to Rule 2020 (3/21/02)**

| REQUIREMENTS  | District Rule<br>2020<br>(9/17/98) | District Rule<br>2020<br>(3/21/02) |
|---|------------------------------------|------------------------------------|
| An ATC or PTO is not required for listed exempt equipment.  | ✓                                  | ✓                                  |
| Conditions are stated under which listed exempt equipment will require an ATC or PTO.   | ✓                                  | ✓                                  |
| Record keeping is required to verify and maintain exemption, when the exemption is based on a maximum daily limitation.             | ✓                                  | ✓                                  |
| A compliance schedule is stated for equipment which loses exemption from permitting, necessitating submission of a PTO application. | ✓                                  | ✓                                  |

6. District Rules 2031, 2070 and 2080 - (Transfer of Permits, Standards for Granting Applications, Conditional Approval)

These rules set forth requirements to comply with all conditions of the Permit to Operate. Permits to Operate or Authorities to Construct are not transferable unless a new application is filed with and approved by the District. All source operations must be constructed and operated as specified in the Authority to Construct. Conditions 5 and 6 of the facility-wide requirements (S-75-0-1) assure compliance with this rule.

7. District Rule 2040 - Applications

Section 3.0 requires that every application for a permit shall be filed in a manner and form prescribed by the District. Condition 7 of the facility-wide requirements (S-75-0-1) assures compliance with this rule.

8. District Rule 2520 – Federally Mandated Operating Permits

Section 5.2 requires permittees submit applications for Title V permit renewal at least six months prior to permit expiration. Condition 77 of the facility-wide requirements (S-75-0-1) assures compliance with this requirement.

Section 9.0 of District Rule 2520 requires certain elements to be contained in each Title V permit:

Section 9.1.1 of District Rule 2520 requires all conditions on Title V permits specify a reference of the origin of an authority for each term or condition, and identify any difference in form as compared to the applicable requirements upon which the term or condition is based.

Section 9.4 contains requirements to incorporate all applicable recordkeeping requirements into the Title V permit. This section also specifies records of any required monitoring and support data be kept for a period of five years. The requirements to keep specific monitoring records and retain records for five years are stated in the facility-wide requirements (S-75-0-1) in the following conditions:

| Permit Unit | Condition      |
|-------------|----------------|
| -0-1        | 8, 9           |
| -1-4        | 47, 48, 53     |
| -2-4        | 48, 49, 50, 54 |
| -3-5        | 10, 14         |
| -4-5        | 9, 13          |
| -5-3        | 26             |
| -6-15       | 63             |
| -7-3        | 22             |
| -9-4        | 53, 54         |
| -10-4       | 40             |
| -11-12      | 98             |
| -12-2       | 15, 16         |
| -13-2       | 15, 16         |
| -16-1       | 10             |
| -17-1       | 10             |
| -18-1       | 10             |
| -21-1       | 6, 10          |

Section 9.5 requires the submittal of monitoring reports at least every six months. Prompt reporting of deviations from permitting requirements, including those attributable to upset conditions is also required. The

responsible official must certify all required reports. Conditions 10 and 11 of the facility-wide requirements (S-75-0-1) assure compliance with this requirement.

Section 9.7 states that the Title V permit must also contain a severability clause in case of a court challenge; the severability clause is stated in condition 12 of the facility-wide requirements (S-75-0-1).

Section 9.8 contains requirements for provisions in the Title V permit stating 1) the permittee must comply with all permit conditions; 2) the permitted activity should not be reduced in order to comply with the permit conditions. Further, this reasoning shall not be used as a defense in an enforcement action, 3) the permit may be revoked, modified, reissued, or reopened for cause, 4) the Title V permit does not reflect any property rights, and 5) the permittee will furnish the District with any requested information to determine compliance with the conditions of the Title V permit. Conditions 5 and 13 through 16 of the facility-wide requirements (S-75-0-1) assure compliance with this requirement.

Section 9.9 requires the permit specify that the permittee pay annual permit fees and applicable fees from District Rules 3010, 3030, 3050, 3080, 3090, 3110, and 3120. Condition 17 of the facility-wide requirements (S-75-0-1) assures compliance with this requirement.

Section 9.13.1 requires any report or document submitted under a permit requirement or a request for information by the District or EPA contain a certification by a responsible official as to truth, accuracy, and completeness. Condition 26 of the facility-wide requirements (S-75-0-1) assures compliance with this requirement.

Section 9.13.2 contains inspection and entry requirements that allows an authorized representative of the District to enter a permittee's premises to inspect equipment, operations, work practices, permits on file, and to sample substances or monitor parameters for the purpose of assuring compliance with the permit requirements. Conditions 18 through 21 of the facility-wide requirements (S-75-0-1) assure compliance with this requirement.

Section 9.16 requires that the permittee submit certification of compliance with the terms and standards of Title V permits to the EPA and the District annually (or more frequently as required by the applicable requirement or the District). Condition 36 of the facility-wide requirements (S-75-0-1) assures compliance with this requirement.

Section 10.0 requires any application form, report, or compliance certification submitted pursuant to these regulations shall contain

certification of truth, accuracy and completeness by a responsible official. Condition 26 of the facility-wide requirements (S-75-0-1) assures compliance with this requirement.

9. District Rule 2520, 9.3.2 - Federally Mandated Operating Permits

Section 9.3.2 requires that periodic monitoring be performed if none is associated with a given emission limit to assure compliance.

- a. Fuel Receiving, Screening and Conveying #1 (S-75-1-4); Fuel Receiving, Screening and Conveying #2 (S-75-2-4); Limestone Storage Silo #1 (S-75-3-5); Sand Storage Silo #1 (S-75-4-5); Fuel Reclamation, Conveying and Screening (S-75-5-3); 400 MMBtu/hr Biomass Fired Boiler #1 (S-75-6-15); Ash Storage Silo (S-75-7-3); Fuel Receiving, Screening and Conveying (S-75-9-4); Fuel Reclamation, Conveying and Screening Phase II (S-75-10-4); 315 MMBtu/hr Biomass Fired Boiler #2 (S-75-11-12); Limestone Storage Silo #2 (S-75-12-2); Sand Storage Silo #2 (S-75-13-3); Diesel Fired Engines (S-75-16-1, -17-1 and -18-1); Cooling Towers (S-75-19-1 and -20-1); Emergency Fuel Feed System (S-75-21-1)

This requirement is in the conditions of the following permit units:

| Permit Unit | Condition      |
|-------------|----------------|
| -1-4        | 49 through 52  |
| -2-4        | 51 through 53  |
| -3-5        | 11 through 13  |
| -4-5        | 10 through 12  |
| -5-3        | 23 through 25  |
| -6-15       | 60, 61, and 62 |
| -7-3        | 19 through 21  |
| -9-4        | 50,51, and 52  |
| -10-4       | 37 through 39  |
| -11-12      | 97             |
| -12-2       | 12 through 14  |
| -13-2       | 12 through 14  |
| -16-1       | 11             |
| -17-1       | 11             |
| -18-1       | 11             |
| -21-1       | 8 and 9        |

10. District Rule 4101 – Visible Emissions

EPA issued a relative stringency finding, dated August 20, 1996, stating that District Rule 4101 is more stringent than SIP approved Kern County Rule 401.

Section 5.0 prohibits the discharge of any air contaminant for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker in shade as that designated as No. 1 on the Ringelmann Chart; or is of such opacity as to obscure an observer's view to a degree equal to or greater than the smoke described in Section 5.1 of Rule 4101. This requirement is stated in condition 22 of the facility-wide requirements (S-75-0-1).

11. District Rule 4201 - Particulate Matter Concentration

EPA issued a relative stringency finding, dated August 20, 1996, stating that District Rule 4201 is more stringent than SIP approved Kern County Rule 404. Section 3.1 of District Rule 4201 requires emissions to be at or below 0.1 grains of particulate matter per dry standard cubic foot of exhaust gas.

- a. Fuel Receiving, Screening and Conveying #1 (S-75-1-4); Fuel Receiving, Screening and Conveying #2 (S-75-2-4); Limestone Storage Silo #1 (S-75-3-5); Sand Storage Silo #1 Fuel Receiving (S-75-4-5); Screening and Conveying (S-75-9-4); Ash Storage Silo (S-75-7-3); Limestone Storage Silo #2 (S-75-12-2); Sand Storage Silo #2 (S-75-13-3); Fuel Reclamation, Conveying and Screening (S-75-5-3); Fuel Reclamation, Conveying and Screening Phase II (S-75-10-4); Emergency Fuel Feed System (S-75-21-1)

These units include truck and rail car unloading operations, stockpiles, pneumatic transfer, conveyors, elevators, silos, screens, and dust collectors for handling and storage of biomass, sand, and limestone.

All significant particulate emission sources at the facility have been equipped with a particulate filtration system consisting of a bin vent filter, baghouse unit, or cyclone. Even under moderately heavy PM loading, well designed and operated fabric filter systems have been shown to reduce overall PM emissions to less than 0.010 gr/dscf, and often to less than 0.005 gr/dscf.

This requirement is in the conditions of the following permit units:

| Permit Unit | Condition |
|-------------|-----------|
| -1-4        | 55        |
| -2-4        | 56        |
| -3-5        | 15        |
| -4-5        | 14        |
| -5-3        | 22        |
| -7-3        | 18        |
| -9-4        | 56        |
| -10-4       | 42        |
| -12-2       | 8         |
| -13-2       | 8         |
| -21-1       | 11        |

- b. 400 MMBtu/hr Biomass Fired Boiler #1 (S-75-6-15); 315 MMBtu/hr Biomass Fired Boiler #2 (S-75-11-12)

This requirement is subsumed by the more stringent NSR requirement of 0.01 gr/dscf @ 12%CO<sub>2</sub> and is included as condition 30 of the requirements for permit unit –6-15 and condition 46 of the requirements for permit unit –11-12. Requirements from District Rule 4201 for permit units S-75-6-15 and –11-12 have been addressed in a streamlining demonstration and can be seen in Section C.

- c. Diesel Fired Engine 244 bhp (S-75-16-1); Diesel Fired Engine 830 bhp (S-75-17-1); Diesel Fired Engine 1106 bhp (S-75–18-1)

Section 3.1 requires emissions to be at or below 0.1 grain of particulate matter per dry standard cubic foot of exhaust gas. Results from source tests of diesel-fired internal combustion (IC) engines generally indicate emission rates from these units are less than the allowable limit of 0.1 grain/dscf. Of the tests available at the time of this writing, most were in the range of 0.042 to 0.061 grain/dscf, with a low of 0.020 grain/dscf, and a high of 0.092 grain/dscf. Since these are emergency standby engines with operation limited to less than 200 hours/year, no source testing will be required to demonstrate compliance.

12. District Rule 4202 - Particulate Matter Emission Rate

Section 4.0 of this rule determines emission rate of particulate matter based on the process weight. For the process weight less than, equal to,

and greater than 30-ton/hr maximum allowable emission rate can be calculated as shown below.

$$E_{\max} = 3.59(P)^{0.62} \quad (\text{Emission rate equation for } P < 30 \text{ Tons/Hr})$$

$$E_{\max} = 17.37(P)^{0.16} \quad (\text{Emission rate equation for } P > 30 \text{ Tons/Hr})$$

Where:

$E_{\max}$  = Maximum Allowable Emission Rate

P = Process Weight in Tons/Hr

- a. Fuel Receiving, Screening and Conveying #1 (S-75-1-4); Fuel Receiving, Screening and Conveying #2 (S-75-2-4); Fuel Reclamation, Conveying, and Screening (S-75-5-3)

Units –1-4 and 2-4 are equipped with 186 ton/hr capacity conveyers #2, #3, and #4. The maximum emission rate may be calculated as follows:

$$E = 17.37 \times 186^{0.16} = 40.1 \text{ lb PM/hr}$$

These permit units are equipped with bin vent filters, therefore compliance with this rule is expected. Condition 54 of the requirements for permit unit –1-4 and condition 55 of the requirements for permit unit 2-4 assures compliance with this rule.

Permit unit –5-3 is equipped with a 45 ton/hr capacity reclaimer. The maximum emission rate may be calculated as follows:

$$E = 17.37 \times 45^{0.16} = 31.9 \text{ lb PM/hr}$$

These permit units are equipped with bin vent filters, therefore compliance with this rule is expected. Condition 27 of the requirements for permit unit -5-3 assures compliance with this rule.

- b. Limestone Storage Silo #1 (S-75-3-5); Sand Storage Silo #1 (S-75-4-5)

The silo receives a maximum of 25 tons/day of product. This is equivalent to 1.04 tons/hr of product. The maximum emission rate can be calculated as follows:

$$E = 3.59 \times 1.04^{0.62} = 3.67 \text{ lb PM/hr}$$

Condition 9 of the requirements for permit unit -3-5 and condition 8 of the requirements for permit unit -4-5 limit the amount of PM10

emissions to 0.024 lbs/ton loaded. The actual emissions may be calculated as follows:

$$E_{\text{act}} = \left( \frac{0.024 \text{ lbs}}{\text{ton}} \right) \left( \frac{25 \text{ tons}}{\text{day}} \right) \left( \frac{\text{day}}{24 \text{ hrs}} \right) = 0.025 \text{ lb PM}_{10} / \text{hr}$$

This actual emission of 0.025 lb PM<sub>10</sub>/hr is clearly under the allowable limit.

- c. 400 MMBtu Biomass Fired Boiler (S-75-6-15); 315 MMBtu Biomass Fired Boiler (S-75-11-12)

#### 400 MMBtu Boiler

The process rate can be determined from the heat rating in Section 1.6.1 of AP-42, Wood Waste Combustion in Boilers, which states heating values for wood waste ranges between 4,000 and 5,000 Btu/lb fuel on a wet as-fired basis. A lower heating value of 4000 Btu/lb will be assumed for the worst case possible. This may be calculated as follows:

$$\text{tons/hr} = \left( \frac{400 \text{ MBtu}}{\text{hr}} \right) \left( \frac{\text{lb}}{0.004 \text{ MMBtu}} \right) \left( \frac{\text{ton}}{2000 \text{ lb}} \right) = 50 \text{ tons/hr}$$

The maximum allowable emission limit may then be calculated as follows:

$$E = 17.37 \times 50^{0.16} = 32.5 \text{ lb PM/hr}$$

Compliance is assured by condition 27 of the requirements for permit unit -6-15, which limits the PM<sub>10</sub> emissions to 17.74 lb/hr.

#### 315 MMBtu Boiler

The process rate can be determined from the heat rating in Section 1.6.1 of AP-42, Wood Waste Combustion in Boilers, which states heating values for wood waste ranges between 4,000 and 5,000 Btu/lb fuel on a wet as-fired basis. A lower heating value of 4000 Btu/lb will be assumed for the worst case possible. This may be calculated as follows:

$$\text{tons/hr} = \left( \frac{315 \text{ MBtu}}{\text{hr}} \right) \left( \frac{\text{lb}}{0.004 \text{ MMBtu}} \right) \left( \frac{\text{ton}}{2000 \text{ lb}} \right) = 39.4 \text{ tons/hr}$$



The maximum allowable emission limit may then be calculated as follows:

$$E = 17.37 \times 39.4^{0.16} = 31.2 \text{ lb PM/hr}$$

Compliance is assured by conditions 26 of the requirements for permit unit S-75-11-12, which limits the PM10 emission to 14.08 lb/hr.

- d. Ash Storage Silo (S-75-7-3); Limestone Receiving and Storage Silo #2 (S-75-12-2); Sand Storage Silo #2 (S-75-13-2)

These permit units are equipped with bin vent filters, therefore compliance with this rule is expected. Each of these units contains permit conditions to assure that the filters are properly maintained and operated. Condition 23 of the requirements for permit unit -7-3, and condition 17 of the requirements for permit units -12-2 and -13-2 assure compliance with this rule.

- e. Fuel Receiving, Screening and Conveying (S-75-9-4); Fuel Receiving, Screening and Conveying (S-75-10-4)

The maximum process rate through these operations is 170 tons/hr. The maximum emission rate can be calculated as follows:

$$E = 17.37 \times 170^{0.16} = 39.5 \text{ lb PM/hr}$$

These permit units are equipped with baghouses, therefore compliance with 39.5 lb/hr emission limit is expected. A condition stating the requirements of this rule has been added as condition 55 of permit unit -9-4 and condition 41 of permit unit -10-4.

- f. Wet Cooling Tower (S-75-19-1); Wet Cooling Tower (S-75-20-1)

Permit unit -19-1 has a maximum capacity of 28,000 gpm and permit unit -20-1 has a maximum capacity of 18,000 gpm. Compliance for both units will be shown using the 28,000-gpm flow rate.

The maximum process rate may be calculated as follows:

$$P = \left( \frac{28,000 \text{ gal}}{\text{min}} \right) \left( \frac{\text{ft}^3}{7.48 \text{ gal}} \right) \left( \frac{62.34 \text{ lb}}{\text{ft}^3} \right) \left( \frac{\text{ton}}{2000 \text{ lb}} \right) \left( \frac{60 \text{ min}}{\text{hr}} \right) = 7000 \text{ tons/hr}$$

The allowable emission rate may be calculated as follows:

$$E_{\text{all}} = 17.37 \times 7000^{0.16} = 71.61 \text{ lb PM/hr}$$

The actual emission rate may then be calculated as follows:

$$E_{\text{act}} = \left( \frac{0.019 \text{ lb PM}_{10}}{10^3 \text{ gal}} \right) \left( \frac{28,000 \text{ gal}}{\text{min}} \right) \left( \frac{60 \text{ min}}{\text{hr}} \right) = 31.92 \text{ lb PM}_{10} / \text{hr}$$

where:

$$\left( \frac{0.019 \text{ lb PM}_{10}}{10^3 \text{ gal}} \right) = \text{AP42 emission factor for PM}_{10} \text{ from wet cooling towers}$$

The actual emission rate is less than the allowable, therefore compliance with this rule is assured.

12. District Rule 4301 – Fuel Burning Equipment

- a. 400 MMBtu/hr Biomass Fired Boiler #1 (S-75-6-15); 315 MMBtu/hr Biomass Fired Boiler #2 (S-75-11-12)

This requirement has been streamlined. See Section X.

13. District Rule 4352 – Solid Fuel Fired Boilers, Steam Generators and Process Heaters

- a. 400 MMBtu/hr Biomass Fired Boiler #1 (S-75-6-15); 315 MMBtu/hr Biomass Fired Boiler #2 (S-75-11-12)

This requirement has been streamlined. See Section X.

14. District Rule 4601

This rule limits the emissions of VOCs from architectural coatings. It requires limiting the application of any architectural coating to no more than what is listed in the Table of Standards (Section 5.0). This rule further specifies labeling requirements, coatings thinning recommendations and storage requirements. Conditions 23, 24, 25, 26 and 27 of the facility-wide requirements (S-75-0-1) assure compliance with this rule.

The current rule differs significantly from the previously SIP approved 9/17/97 version. The tables outlining the VOC content of different

specialty coatings have been largely replaced with the Table of Standards in Section 5.0. New labeling, reporting, test methodology and other requirements have been incorporated into the rule in order to allow ARB to administer the Averaging Program as detailed in Section 8.0.

15. District Rule 4801 - Sulfur Compounds

District Rule 4801 has been submitted to the EPA to replace Kern County APCD Rule 407 that is in the SIP. District Rule 4801 is as stringent as Kern County Rule 407, as shown on Table 5.

**Table 5 - Comparison of District Rule 4801 and Kern County Rule 407**

| REQUIREMENT  | 4801 District | 407 Kern |
|--|---------------|----------|
| A person shall not discharge into the atmosphere sulfur compounds exceeding in concentration at the point of discharge 0.2 percent by volume calculated as sulfur dioxide on a dry basis averaged over 15 consecutive minutes. | ✓             | ✓        |
| EPA Method 8 and CARB Method 1-100 shall be used to determine such emissions.  | ✓             |          |

The rule requires that sulfur compounds not exceed 0.2 percent by volume (2000 ppmv) at the point of discharge on a dry basis averaged over 15 consecutive minutes.

- a. 400 MMBtu/hr Biomass Fired Boiler #1 (S-75-6-15); 315 MMBtu/hr Biomass Fired Boiler #2 (S-75-11-12)

Compliance with this requirement is assured by the more stringent condition 28 of the requirements for permit units -6-15 and condition 27 of the requirements for permit unit -11-12, which limit the SO<sub>x</sub> emissions to 23 ppmvd @ 3% O<sub>2</sub>.

- b. Diesel Fired Engines (S-75-16-1, -17-1 and -18-1)

The maximum fuel sulfur content that can be combusted in a diesel-fired IC engine to comply with the sulfur emission limit of 2000 ppmv is calculated as follows:

$$\frac{\left(\frac{137,000 \text{ Btu}}{\text{gal}}\right) \left(\frac{9190 \text{ dscf}}{10^6 \text{ Btu}}\right) \left(\frac{32.06 \text{ gS}}{\text{mol}}\right) \left(\frac{0.002 \text{ molS}}{\text{mol exhaust}}\right) \left(\frac{28.317 \text{ L}}{\text{cf}}\right)}{\left(\frac{23.6 \text{ L}}{\text{mol}}\right) \left(\frac{7.05 \text{ lb}}{\text{gal}}\right) \left(\frac{45,359 \text{ g}}{\text{lb}}\right)} = 0.030 \frac{\text{lb-S}}{\text{lb-Diesel}}$$

where:

$$\left(\frac{9190 \text{ dscf}}{10^6 \text{ Btu}}\right) = \text{F-Factor for Diesel (40 CFR App. A Table 19-1)}$$

137,000 = Heat content of diesel (AP42, Appendix A)

7.05 = density of diesel (AP42, Appendix A)

23.6 = Volume 1 mole of gas occupies at standard conditions

32 = Molecular weight of sulfur

Diesel fuel with a sulfur content of less than 3.0% by weight will satisfy the conditions of District Rule 4801. Condition 4 of the requirements for permit units -16-1, -17-1, and 18-1 assures compliance with this requirement, because it limits the sulfur content of the fuel to 0.05% by weight.

16. District Regulation VIII - Fugitive Dust (PM<sub>10</sub>)

These regulations contain requirements for the control of fugitive dust. These requirements apply to various sources, including construction, demolition, excavation, extraction, mining activities, outdoor storage piles, paved and unpaved roads. Compliance with these regulations will be assured by permit conditions 29 through 34 of the requirements for permit unit -0-1.

17. 40 CFR Part 60 Subpart Db- Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units

- a. 400 MMBtu/hr Biomass Fired Boiler #1 (S-75-6-15); 315 MMBtu/hr Biomass Fired Boiler #2 (S-75-11-12)

Subpart Db provides New Source Performance Standards for steam generating units that commenced construction, modification, or reconstruction after June 19, 1984, and that have a heat input capacity from fuels combusted in the steam generating unit of greater than 100 MMBtu/hr. Conditions 10, 11, 12, and 26 of the requirements for permit unit -6-15 and conditions 10, 11, 12, and 25 of the requirements for permit unit -11-12 assure compliance with these requirements.

18. 40 CFR Part 61, Subpart M - National Emission Standard for Asbestos

There are applicable requirements from the National Emissions Standards for Hazardous Air Pollutants that apply to all sources in general. These requirements pertain to asbestos removal and disposal from renovated or demolished structures. Compliance with these requirements is assured by condition 35 of the facility-wide requirements (S-75-0-1).

19. 40 CFR Part 68 - Chemical Accident Prevention Provisions

The requirements of this provision mandate that subject facilities submit a Risk Management Plan to the proper authority. Condition 40 of the facility-wide requirements S-75-0-1 requires compliance with this provision.

20. 40 CFR Part 82, Subpart F - Stratospheric Ozone

There are applicable requirements from Title VI of the CAA (Stratospheric Ozone) that apply to all sources in general. These requirements pertain to air conditioners, chillers and refrigerators located at a Title V source and to disposal of air conditioners or maintenance/recharging/disposal of motor vehicle air conditioners (MVAC). These requirements are addressed in conditions 27 and 28 of the facility-wide requirements (S-75-0-1).

21. New and Modified Stationary Source Review Rule (District NSR Rule)

a. Fuel Receiving, Screening and Conveying #1 (S-75-1-2)

This permit unit was subject to the District NSR Rule at the time the applicant applied for Authority to Construct. In accordance with the White Paper for Streamlined Development of Part 70 Permit Applications, dated July 10, 1995, conditions from the resulting PTO were addressed to define how NSR permit terms should be incorporated into the Title V permit.

- Condition 1 from the PTO is included as permit condition 1 of the requirements for permit unit S-75-1-4.
- Condition 2 from the PTO is included as permit condition 2 of the requirements for permit unit S-75-1-4.
- Condition 3 from the PTO is included as permit condition 3 of the requirements for permit unit S-75-1-4.

- Condition 4 from the PTO is included as permit condition 4 of the requirements for permit unit S-75-1-4.
- Condition 5 from the PTO is included as permit condition 5 of the requirements for permit unit S-75-1-4.
- Condition 6 from the PTO is included as permit condition 6 of the requirements for permit unit S-75-1-4.
- Condition 7 from the PTO is included as permit condition 7 of the requirements for permit unit S-75-1-4.
- Condition 8 from the PTO is included as permit condition 8 of the requirements for permit unit S-75-1-4.
- Condition 9 from the PTO is included as permit condition 9 of the requirements for permit unit S-75-1-4.
- Condition 10 from the PTO is included as permit condition 10 of the requirements for permit unit S-75-1-4.
- Condition 11 from the PTO is included as permit condition 11 of the requirements for permit unit S-75-1-4.
- Condition 12 from the PTO is included as permit condition 12 of the requirements for permit unit S-75-1-4.
- Condition 13 from the PTO is included as permit condition 13 of the requirements for permit unit S-75-1-4.
- Condition 14 from the PTO is included as permit condition 14 of the requirements for permit unit S-75-1-4.
- Condition 15 from the PTO is included as permit condition 15 of the requirements for permit unit S-75-1-4.
- Condition 16 from the PTO is included as permit condition 16 of the requirements for permit unit S-75-1-4.
- Condition 17 from the PTO is included as permit condition 17 of the requirements for permit unit S-75-1-4.
- Condition 18 from the PTO is included as permit condition 18 of the requirements for permit unit S-75-1-4.
- Condition 19 from the PTO is included as permit condition 19 of the requirements for permit unit S-75-1-4.
- Condition 20 from the PTO is included as permit condition 20 of the requirements for permit unit S-75-1-4.
- Condition 21 from the PTO is included as permit condition 21 of the requirements for permit unit S-75-1-4.
- Condition 22 from the PTO is included as permit condition 22 of the requirements for permit unit S-75-1-4.
- Condition 23 from the PTO is included as permit condition 23 of the requirements for permit unit S-75-1-4.
- Condition 24 from the PTO is included as permit condition 24 of the requirements for permit unit S-75-1-4.
- Condition 25 from the PTO is included as permit condition 25 of the requirements for permit unit S-75-1-4.

- Condition 26 from the PTO is included as permit condition 26 of the requirements for permit unit S-75-1-4.
- Condition 27 from the PTO is included as permit condition 27 of the requirements for permit unit S-75-1-4.
- Condition 28 from the PTO is included as permit condition 28 of the requirements for permit unit S-75-1-4.
- Condition 29 from the PTO is included as permit condition 29 of the requirements for permit unit S-75-1-4.
- Condition 30 from the PTO is included as permit condition 30 of the requirements for permit unit S-75-1-4.
- Condition 31 from the PTO is included as permit condition 31 of the requirements for permit unit S-75-1-4.
- Condition 32 from the PTO is included as permit condition 32 of the requirements for permit unit S-75-1-4.
- Condition 33 from the PTO is included as permit condition 33 of the requirements for permit unit S-75-1-4.
- Condition 34 from the PTO is included as permit condition 34 of the requirements for permit unit S-75-1-4.
- Condition 35 from the PTO is included as permit condition 35 of the requirements for permit unit S-75-1-4.
- Condition 36 from the PTO is included as permit condition 36 of the requirements for permit unit S-75-1-4.
- Condition 37 from the PTO is included as permit condition 37 of the requirements for permit unit S-75-1-4.
- Condition 38 from the PTO is included as permit condition 38 of the requirements for permit unit S-75-1-4.
- Condition 39 from the PTO is included as permit condition 39 of the requirements for permit unit S-75-1-4.
- Condition 40 from the PTO is included as permit condition 40 of the requirements for permit unit S-75-1-4.
- Condition 41 from the PTO is included as permit condition 42 of the facility-wide requirements (S-75-0-1).
- Condition 42 from the PTO is included as permit condition 41 of the requirements for permit unit S-75-1-4.
- Condition 43 from the PTO is included as permit condition 39 of the facility-wide requirements (S-75-0-1).
- Condition 44 from the PTO is included as permit condition 42 of the requirements for permit unit S-75-1-4.
- Condition 45 from the PTO is included as permit condition 43 of the requirements for permit unit S-75-1-4.
- Condition 46 from the PTO is included as permit condition 44 of the requirements for permit unit S-75-1-4.
- Condition 47 from the PTO is included as permit condition 45 of the requirements for permit unit S-75-1-4.

- Condition 48 from the PTO is included as permit condition 46 of the requirements for permit unit S-75-1-4.

b. Fuel Receiving, Screening and Conveying #2 (S-75-2-2)

This permit unit was subject to the District NSR Rule at the time the applicant applied for Authority to Construct. In accordance with the White Paper for Streamlined Development of Part 70 Permit Applications, dated July 10, 1995, conditions from the resulting PTO were addressed to define how NSR permit terms should be incorporated into the Title V permit.

- Condition 1 from the PTO is included as permit condition 1 of the requirements for permit unit S-75-2-4.
- Condition 2 from the PTO is included as permit condition 2 of the requirements for permit unit S-75-2-4.
- Condition 3 from the PTO is included as permit condition 3 of the requirements for permit unit S-75-2-4.
- Condition 4 from the PTO is included as permit condition 4 of the requirements for permit unit S-75-2-4.
- Condition 5 from the PTO is included as permit condition 5 of the requirements for permit unit S-75-2-4.
- Condition 6 from the PTO is included as permit condition 6 of the requirements for permit unit S-75-2-4.
- Condition 7 from the PTO is included as permit condition 7 of the requirements for permit unit S-75-2-4.
- Condition 8 from the PTO is included as permit condition 8 of the requirements for permit unit S-75-2-4.
- Condition 9 from the PTO is included as permit condition 9 of the requirements for permit unit S-75-2-4.
- Condition 10 from the PTO is included as permit condition 10 of the requirements for permit unit S-75-2-4.
- Condition 11 from the PTO is included as permit condition 11 of the requirements for permit unit S-75-2-4.
- Condition 12 from the PTO is included as permit condition 12 of the requirements for permit unit S-75-2-4.
- Condition 13 from the PTO is included as permit condition 13 of the requirements for permit unit S-75-2-4.
- Condition 14 from the PTO is included as permit condition 14 of the requirements for permit unit S-75-2-4.
- Condition 15 from the PTO is included as permit condition 15 of the requirements for permit unit S-75-2-4.
- Condition 16 from the PTO is included as permit condition 16 of the requirements for permit unit S-75-2-4.



- Condition 17 from the PTO is included as permit condition 17 of the requirements for permit unit S-75-2-4.
- Condition 18 from the PTO is included as permit condition 18 of the requirements for permit unit S-75-2-4.
- Condition 19 from the PTO is included as permit condition 19 of the requirements for permit unit S-75-2-4.
- Condition 20 from the PTO is included as permit condition 20 of the requirements for permit unit S-75-2-4.
- Condition 21 from the PTO is included as permit condition 21 of the requirements for permit unit S-75-2-4.
- Condition 22 from the PTO is included as permit condition 22 of the requirements for permit unit S-75-2-4.
- Condition 23 from the PTO is included as permit condition 23 of the requirements for permit unit S-75-2-4.
- Condition 24 from the PTO is included as permit condition 24 of the requirements for permit unit S-75-2-4.
- Condition 25 from the PTO is included as permit condition 25 of the requirements for permit unit S-75-2-4.
- Condition 26 from the PTO is included as permit condition 26 of the requirements for permit unit S-75-2-4.
- Condition 27 from the PTO is included as permit condition 27 of the requirements for permit unit S-75-2-4.
- Condition 28 from the PTO is included as permit condition 28 of the requirements for permit unit S-75-2-4.
- Condition 29 from the PTO is included as permit condition 29 of the requirements for permit unit S-75-2-4.
- Condition 30 from the PTO is included as permit condition 30 of the requirements for permit unit S-75-2-4.
- Condition 31 from the PTO is included as permit condition 31 of the requirements for permit unit S-75-2-4.
- Condition 32 from the PTO is included as permit condition 32 of the requirements for permit unit S-75-2-4.
- Condition 33 from the PTO is included as permit condition 33 of the requirements for permit unit S-75-2-4.
- Condition 34 from the PTO is included as permit condition 34 of the requirements for permit unit S-75-2-4.
- Condition 35 from the PTO is included as permit condition 35 of the requirements for permit unit S-75-2-4.
- Condition 36 from the PTO is included as permit condition 36 of the requirements for permit unit S-75-2-4.
- Condition 37 from the PTO is included as permit condition 37 of the requirements for permit unit S-75-2-4.
- Condition 38 from the PTO is included as permit condition 38 of the requirements for permit unit S-75-2-4.

- Condition 39 from the PTO is included as permit condition 39 of the requirements for permit unit S-75-2-4.
- Condition 40 from the PTO is included as permit condition 40 of the requirements for permit unit S-75-2-4.
- Condition 41 from the PTO is included as permit condition 42 of the facility-wide requirements (S-75-0-1).
- Condition 42 from the PTO is included as permit condition 41 of the requirements for permit unit S-75-2-4.
- Condition 43 from the PTO is included as permit condition 39 of the facility-wide requirements (S-75-0-1).
- Condition 44 from the PTO is included as permit condition 42 of the requirements for permit unit S-75-2-4.
- Condition 45 from the PTO is included as permit condition 43 of the requirements for permit unit S-75-2-4.
- Condition 46 from the PTO is included as permit condition 44 of the requirements for permit unit S-75-2-4.
- Condition 47 from the PTO is included as permit condition 45 of the requirements for permit unit S-75-2-4.
- Condition 48 from the PTO is included as permit condition 46 of the requirements for permit unit S-75-2-4.

c. Limestone Storage Silo #1 (S-75-3-4)

This permit unit was subject to the District NSR Rule at the time the applicant applied for Authority to Construct. In accordance with the White Paper for Streamlined Development of Part 70 Permit Applications, dated July 10, 1995, conditions from the resulting PTO were addressed to define how NSR permit terms should be incorporated into the Title V permit.

- Condition 1 from the PTO is included as permit condition 1 of the requirements for permit unit S-75-3-5.
- Condition 2 from the PTO is included as permit condition 2 of the requirements for permit unit S-75-3-5.
- Condition 3 from the PTO is included as permit condition 3 of the requirements for permit unit S-75-3-5.
- Condition 4 from the PTO has been divided into two separate conditions and is included as permit conditions 4 and 5 of the requirements for permit unit S-75-3-5.
- Condition 5 from the PTO is included as permit condition 6 of the requirements for permit unit S-75-3-5.
- Condition 6 from the PTO is included as permit condition 7 of the requirements for permit unit S-75-3-5.
- Condition 7 from the PTO is included as permit condition 8 of the requirements for permit unit S-75-3-5.

- Condition 8 from the PTO is included as permit condition 9 of the requirements for permit unit S-75-3-5.
- Condition 9 from the PTO is included as permit condition 10 of the requirements for permit unit S-75-3-5. The record retention time was changed from 2 years to 5 years to comply with District Rule 2520, 9.4.2.

d. Sand Storage Silo #1 (S-75-4-4)

This permit unit was subject to the District NSR Rule at the time the applicant applied for Authority to Construct. In accordance with the White Paper for Streamlined Development of Part 70 Permit Applications, dated July 10, 1995, conditions from the resulting PTO were addressed to define how NSR permit terms should be incorporated into the Title V permit.

- Condition 1 from the PTO is included as permit condition 1 of the requirements for permit unit S-75-4-5.
- Condition 2 from the PTO is included as permit condition 2 of the requirements for permit unit S-75-4-5.
- Condition 3 from the PTO is included as permit condition 3 of the requirements for permit unit S-75-4-5.
- Condition 4 from the PTO has been divided into two separate conditions and is included as permit conditions 4 and 5 of the requirements for permit unit S-75-4-5.
- Condition 5 from the PTO is included as permit condition 6 of the requirements for permit unit S-75-4-5.
- Condition 6 from the PTO is included as permit condition 7 of the requirements for permit unit S-75-4-5.
- Condition 7 from the PTO is included as permit condition 8 of the requirements for permit unit S-75-4-5.
- Condition 8 from the PTO is included as permit condition 9 of the requirements for permit unit S-75-4-5. The record retention time was changed from 2 years to 5 years to comply with District Rule 2520, 9.4.2.

e. Fuel Reclamation, Conveying and Screening (S-75-5-2)

This permit unit was subject to the District NSR Rule at the time the applicant applied for Authority to Construct. In accordance with the White Paper for Streamlined Development of Part 70 Permit Applications, dated July 10, 1995, conditions from the resulting PTO were addressed to define how NSR permit terms should be incorporated into the Title V permit.

- Condition 1 from the PTO is included as permit condition 1 of the requirements for permit unit S-75-5-3.
- Condition 2 from the PTO is included as permit condition 2 of the requirements for permit unit S-75-5-3.
- Condition 3 from the PTO is included as permit condition 3 of the requirements for permit unit S-75-5-3.
- Condition 4 from the PTO is included as permit condition 4 of the requirements for permit unit S-75-5-3.
- Condition 5 from the PTO is included as permit condition 5 of the requirements for permit unit S-75-5-3.
- Condition 6 from the PTO is included as permit condition 6 of the requirements for permit unit S-75-5-3.
- Condition 7 from the PTO is included as permit condition 7 of the requirements for permit unit S-75-5-3.
- Condition 8 from the PTO is included as permit condition 8 of the requirements for permit unit S-75-5-3.
- Condition 9 from the PTO is included as permit condition 9 of the requirements for permit unit S-75-5-3.
- Condition 10 from the PTO is included as permit condition 10 of the requirements for permit unit S-75-5-3.
- Condition 11 from the PTO is included as permit condition 11 of the requirements for permit unit S-75-5-3.
- Condition 12 from the PTO is included as permit condition 12 of the requirements for permit unit S-75-5-3.
- Condition 13 from the PTO is included as permit condition 13 of the requirements for permit unit S-75-5-3.
- Condition 14 from the PTO is included as permit condition 14 of the requirements for permit unit S-75-5-3.
- Condition 15 from the PTO is included as permit condition 15 of the requirements for permit unit S-75-5-3.
- Condition 16 from the PTO is included as permit condition 16 of the requirements for permit unit S-75-5-3.
- Condition 17 from the PTO is included as permit condition 17 of the requirements for permit unit S-75-5-3.

- Condition 18 from the PTO is included as permit condition 18 of the requirements for permit unit S-75-5-3.
- Condition 19 from the PTO is included as permit condition 19 of the requirements for permit unit S-75-5-3.
- Condition 20 from the PTO is included as permit condition 20 of the requirements for permit unit S-75-5-3.
- Condition 21 from the PTO is included as permit condition 21 of the requirements for permit unit S-75-5-3.
- Condition 22 from the PTO is included as permit condition 22 of the requirements for permit unit S-75-5-3.

f. 400 MMBtu/hr Biomass Fired Boiler #1 (S-75-6-21)

This permit unit was subject to the District NSR Rule at the time the applicant applied for Authority to Construct. In accordance with the White Paper for Streamlined Development of Part 70 Permit Applications, dated July 10, 1995, conditions from the resulting ATC were addressed to define how NSR permit terms should be incorporated into the Title V permit.

- Conditions 1 through 59 of the ATC are included as permit conditions 1 through 59 of the requirements for permit unit S-75-6-15.

g. Ash Storage Silo (S-75-7-2)

This permit unit was subject to the District NSR Rule at the time the applicant applied for Authority to Construct. In accordance with the White Paper for Streamlined Development of Part 70 Permit Applications, dated July 10, 1995, conditions from the resulting PTO were addressed to define how NSR permit terms should be incorporated into the Title V permit.

- Condition 1 from the PTO is included as permit condition 1 of the requirements for permit unit S-75-7-3.
- Condition 2 from the PTO is included as permit condition 2 of the requirements for permit unit S-75-7-3.
- Condition 3 from the PTO is included as permit condition 3 of the requirements for permit unit S-75-7-3.
- Condition 4 from the PTO is included as permit condition 4 of the requirements for permit unit S-75-7-3.
- Condition 5 from the PTO is included as permit condition 5 of the requirements for permit unit S-75-7-3.
- Condition 6 from the PTO is included as permit condition 6 of the requirements for permit unit S-75-7-3.

- Condition 7 from the PTO is included as permit condition 7 of the requirements for permit unit S-75-7-3.
- Condition 8 from the PTO is included as permit condition 8 of the requirements for permit unit S-75-7-3.
- Condition 9 from the PTO is included as permit condition 9 of the requirements for permit unit S-75-7-3.
- Condition 10 from the PTO is included as permit condition 10 of the requirements for permit unit S-75-7-3.
- Condition 11 from the PTO is included as permit condition 11 of the requirements for permit unit S-75-7-3.
- Condition 12 from the PTO is included as permit condition 12 of the requirements for permit unit S-75-7-3.
- Condition 13 from the PTO is included as permit condition 13 of the requirements for permit unit S-75-7-3.
- Condition 14 from the PTO is included as permit condition 14 of the requirements for permit unit S-75-7-3.
- Condition 15 from the PTO is included as permit condition 15 of the requirements for permit unit S-75-7-3.
- Condition 16 from the PTO is included as permit condition 16 of the requirements for permit unit S-75-7-3.
- Condition 17 from the PTO is included as permit condition 17 of the requirements for permit unit S-75-7-3.
- Condition 18 from the PTO is included as permit condition 18 of the requirements for permit unit S-75-7-3.

h. Fuel Receiving, Screening and Conveying (S-75-9-3)

This permit unit was subject to the District NSR Rule at the time the applicant applied for Authority to Construct. In accordance with the White Paper for Streamlined Development of Part 70 Permit Applications, dated July 10, 1995, conditions from the resulting PTO were addressed to define how NSR permit terms should be incorporated into the Title V permit.

- Condition 1 from the PTO is included as permit condition 1 of the requirements for permit unit S-75-9-4.
- Condition 2 from the PTO is included as permit condition 2 of the requirements for permit unit S-75-9-4.
- Condition 3 from the PTO is included as permit condition 3 of the requirements for permit unit S-75-9-4.
- Condition 4 from the PTO is included as permit condition 4 of the requirements for permit unit S-75-9-4.
- Condition 5 from the PTO is included as permit condition 5 of the requirements for permit unit S-75-9-4.

- Condition 6 from the PTO is included as permit condition 6 of the requirements for permit unit S-75-9-4.
- Condition 7 from the PTO is included as permit condition 7 of the requirements for permit unit S-75-9-4.
- Condition 8 from the PTO is included as permit condition 8 of the requirements for permit unit S-75-9-4.
- Condition 9 from the PTO is included as permit condition 9 of the requirements for permit unit S-75-9-4.
- Condition 10 from the PTO is included as permit condition 10 of the requirements for permit unit S-75-9-4.
- Condition 11 from the PTO is included as permit condition 11 of the requirements for permit unit S-75-9-4.
- Condition 12 from the PTO is included as permit condition 12 of the requirements for permit unit S-75-9-4.
- Condition 13 from the PTO is included as permit condition 13 of the requirements for permit unit S-75-9-4.
- Condition 14 from the PTO is included as permit condition 14 of the requirements for permit unit S-75-9-4.
- Condition 15 from the PTO is included as permit condition 15 of the requirements for permit unit S-75-9-4.
- Condition 16 from the PTO is included as permit condition 16 of the requirements for permit unit S-75-9-4.
- Condition 17 from the PTO is included as permit condition 17 of the requirements for permit unit S-75-9-4.
- Condition 18 from the PTO is included as permit condition 18 of the requirements for permit unit S-75-9-4.
- Condition 19 from the PTO is included as permit condition 19 of the requirements for permit unit S-75-9-4.
- Condition 20 from the PTO is included as permit condition 20 of the requirements for permit unit S-75-9-4.
- Condition 21 from the PTO is included as permit condition 21 of the requirements for permit unit S-75-9-4.
- Condition 22 from the PTO is included as permit condition 22 of the requirements for permit unit S-75-9-4.
- Condition 23 from the PTO is included as permit condition 23 of the requirements for permit unit S-75-9-4.
- Condition 24 from the PTO is included as permit condition 24 of the requirements for permit unit S-75-9-4.
- Condition 25 from the PTO is included as permit condition 25 of the requirements for permit unit S-75-9-4.
- Condition 26 from the PTO is included as permit condition 26 of the requirements for permit unit S-75-9-4.
- Condition 27 from the PTO is included as permit condition 27 of the requirements for permit unit S-75-9-4.

- Condition 28 from the PTO is included as permit condition 28 of the requirements for permit unit S-75-9-4.
- Condition 29 from the PTO is included as permit condition 29 of the requirements for permit unit S-75-9-4.
- Condition 30 from the PTO is included as permit condition 30 of the requirements for permit unit S-75-9-4.
- Condition 31 from the PTO is included as permit condition 31 of the requirements for permit unit S-75-9-4.
- Condition 32 from the PTO is included as permit condition 32 of the requirements for permit unit S-75-9-4.
- Condition 33 from the PTO is included as permit condition 33 of the requirements for permit unit S-75-9-4.
- Condition 34 from the PTO is included as permit condition 34 of the requirements for permit unit S-75-9-4.
- Condition 35 from the PTO is included as permit condition 35 of the requirements for permit unit S-75-9-4.
- Condition 36 from the PTO is included as permit condition 36 of the requirements for permit unit S-75-9-4.
- Condition 37 from the PTO is included as permit condition 37 of the requirements for permit unit S-75-9-4.
- Condition 38 from the PTO is included as permit condition 38 of the requirements for permit unit S-75-9-4.
- Condition 39 from the PTO is included as permit condition 39 of the requirements for permit unit S-75-9-4.
- Condition 40 from the PTO is included as permit condition 40 of the requirements for permit unit S-75-9-4.
- Condition 41 from the PTO is included as permit condition 41 of the requirements for permit unit S-75-9-4.
- Condition 42 from the PTO is included as permit condition 42 of the requirements for permit unit S-75-9-4.
- Condition 43 from the PTO is included as permit condition 43 of the requirements for permit unit S-75-9-4.
- Condition 44 from the PTO is included as permit condition 44 of the requirements for permit unit S-75-9-4.
- Condition 45 from the PTO is included as permit condition 45 of the requirements for permit unit S-75-9-4.
- Condition 46 from the PTO is included as permit condition 46 of the requirements for permit unit S-75-9-4.
- Condition 47 from the PTO is included as permit condition 47 of the requirements for permit unit S-75-9-4.
- Condition 48 from the PTO is included as permit condition 48 of the requirements for permit unit S-75-9-4.
- Condition 49 from the PTO is included as permit condition 49 of the requirements for permit unit S-75-9-4.



i. Fuel Reclamation, Conveying and Screening Phase II (S-75-10-2)

This permit unit was subject to the District NSR Rule at the time the applicant applied for Authority to Construct. In accordance with the White Paper for Streamlined Development of Part 70 Permit Applications, dated July 10, 1995, conditions from the resulting PTO were addressed to define how NSR permit terms should be incorporated into the Title V permit.

- Condition 1 from the PTO is included as permit condition 1 of the requirements for permit unit S-75-10-4.
- Condition 2 from the PTO is included as permit condition 2 of the requirements for permit unit S-75-10-4.
- Condition 3 from the PTO is included as permit condition 3 of the requirements for permit unit S-75-10-4.
- Condition 4 from the PTO is included as permit condition 4 of the requirements for permit unit S-75-10-4.
- Condition 5 from the PTO is included as permit condition 5 of the requirements for permit unit S-75-10-4.
- Condition 6 from the PTO is included as permit condition 6 of the requirements for permit unit S-75-10-4.
- Condition 7 from the PTO is included as permit condition 7 of the requirements for permit unit S-75-10-4.
- Condition 8 from the PTO is included as permit condition 8 of the requirements for permit unit S-75-10-4.
- Condition 9 from the PTO is included as permit condition 9 of the requirements for permit unit S-75-10-4.
- Condition 10 from the PTO is included as permit condition 10 of the requirements for permit unit S-75-10-4.
- Condition 11 from the PTO is included as permit condition 11 of the requirements for permit unit S-75-10-4.
- Condition 12 from the PTO is included as permit condition 12 of the requirements for permit unit S-75-10-4.
- Condition 13 from the PTO is included as permit condition 13 of the requirements for permit unit S-75-10-4.
- Condition 14 from the PTO is included as permit condition 14 of the requirements for permit unit S-75-10-4.
- Condition 15 from the PTO is included as permit condition 15 of the requirements for permit unit S-75-10-4.
- Condition 16 from the PTO is included as permit condition 16 of the requirements for permit unit S-75-10-4.
- Condition 17 from the PTO is included as permit condition 17 of the requirements for permit unit S-75-10-4.

- Condition 18 from the PTO is included as permit condition 18 of the requirements for permit unit S-75-10-4.
- Condition 19 from the PTO is included as permit condition 19 of the requirements for permit unit S-75-10-4.
- Condition 20 from the PTO is included as permit condition 20 of the requirements for permit unit S-75-10-4.
- Condition 21 from the PTO is included as permit condition 21 of the requirements for permit unit S-75-10-4.
- Condition 22 from the PTO is included as permit condition 22 of the requirements for permit unit S-75-10-4.
- Condition 23 from the PTO is included as permit condition 23 of the requirements for permit unit S-75-10-4.
- Condition 24 from the PTO is included as permit condition 24 of the requirements for permit unit S-75-10-4.
- Condition 25 from the PTO is included as permit condition 25 of the requirements for permit unit S-75-10-4.
- Condition 26 from the PTO is included as permit condition 26 of the requirements for permit unit S-75-10-4.
- Condition 27 from the PTO is included as permit condition 27 of the requirements for permit unit S-75-10-4.
- Condition 28 from the PTO is included as permit condition 28 of the requirements for permit unit S-75-10-4.
- Condition 29 from the PTO is included as permit condition 29 of the requirements for permit unit S-75-10-4.
- Condition 30 from the PTO is included as permit condition 30 of the requirements for permit unit S-75-10-4.
- Condition 31 from the PTO is included as permit condition 31 of the requirements for permit unit S-75-10-4.
- Condition 32 from the PTO is included as permit condition 32 of the requirements for permit unit S-75-10-4.
- Condition 33 from the PTO is included as permit condition 33 of the requirements for permit unit S-75-10-4.
- Condition 34 from the PTO is included as permit condition 34 of the requirements for permit unit S-75-10-4.
- Condition 35 from the PTO is included as permit condition 35 of the requirements for permit unit S-75-10-4.
- Condition 36 from the PTO is included as permit condition 36 of the requirements for permit unit S-75-10-4.

j. 315 MMBtu/hr Biomass Fired Boiler #2 (S-75-11-18)

This permit unit was subject to the District NSR Rule at the time the applicant applied for Authority to Construct. In accordance with the White Paper for Streamlined Development of Part 70

Permit Applications, dated July 10, 1995, conditions from the resulting ATC were addressed to define how NSR permit terms should be incorporated into the Title V permit.

- Conditions 1 through 45 of the ATC are included as permit conditions 1 through 45 of the requirements for permit unit S-75-11-12.
- Condition 46 of the ATC is a startup condition and therefore is not included in permit unit S-75-11-12.
- Conditions 47 through 52 of the ATC are included as permit conditions 46 through 51 of the requirements for permit unit S-75-11-12.
- Condition 53 of the ATC is included as permit condition 52 of permit unit S-75-11-12. The recordkeeping requirement was removed, because it is already addressed in condition 9 of the facility-wide requirements.
- Conditions 54 through 57 of the ATC are included as permit conditions 53 through 56 of the requirements for permit unit S-75-11-12.
- Condition 58 of the ATC is a startup condition and therefore is not included in permit unit S-75-11-12.
- Condition 59 of the ATC is included as permit condition 57 of the requirements for permit unit S-75-11-12.

k. Limestone Storage Silo #2 (S-75-12-1)

This permit unit was subject to the District NSR Rule at the time the applicant applied for Authority to Construct. In accordance with the White Paper for Streamlined Development of Part 70 Permit Applications, dated July 10, 1995, conditions from the resulting PTO were addressed to define how NSR permit terms should be incorporated into the Title V permit.

- Condition 1 from the PTO is included as permit condition 1 of the requirements for permit unit S-75-12-2.
- Condition 2 from the PTO is included as permit condition 2 of the requirements for permit unit S-75-12-2.
- Condition 3 from the PTO is included as permit condition 3 of the requirements for permit unit S-75-12-2.
- Condition 4 from the PTO is included as permit condition 4 of the requirements for permit unit S-75-12-2.
- Condition 5 from the PTO is included as permit condition 5 of the requirements for permit unit S-75-12-2.
- Condition 6 from the PTO is included as permit condition 6 of the requirements for permit unit S-75-12-2.

- Condition 7 from the PTO is included as permit condition 7 of the requirements for permit unit S-75-12-2.
- Condition 8 from the PTO is included as permit condition 8 of the requirements for permit unit S-75-12-2.
- Condition 9 from the PTO is included as permit condition 9 of the requirements for permit unit S-75-12-2.
- Condition 10 from the PTO is included as permit condition 10 of the requirements for permit unit S-75-12-2.
- Condition 11 from the PTO is included as permit condition 9 of the requirements for permit unit S-75-0-1. The record retention time was changed from 2 years to 5 years to comply with District Rule 2520, 9.4.2.

I. Sand Storage Silo #2 (S-75-13-1)

This permit unit was subject to the District NSR Rule at the time the applicant applied for Authority to Construct. In accordance with the White Paper for Streamlined Development of Part 70 Permit Applications, dated July 10, 1995, conditions from the resulting PTO were addressed to define how NSR permit terms should be incorporated into the Title V permit.

- Condition 1 from the PTO is included as permit condition 1 of the requirements for permit unit S-75-13-2.
- Condition 2 from the PTO is included as permit condition 2 of the requirements for permit unit S-75-13-2.
- Condition 3 from the PTO is included as permit condition 3 of the requirements for permit unit S-75-13-2.
- Condition 4 from the PTO is included as permit condition 4 of the requirements for permit unit S-75-13-2.
- Condition 5 from the PTO is included as permit condition 5 of the requirements for permit unit S-75-13-2.
- Condition 6 from the PTO is included as permit condition 6 of the requirements for permit unit S-75-13-2.
- Condition 7 from the PTO is included as permit condition 7 of the requirements for permit unit S-75-13-2.
- Condition 8 from the PTO is included as permit condition 8 of the requirements for permit unit S-75-13-2.
- Condition 9 from the PTO is included as permit condition 9 of the requirements for permit unit S-75-13-2.
- Condition 10 from the PTO is included as permit condition 10 of the requirements for permit unit S-75-13-2.
- Condition 11 from the PTO is included as permit condition 9 of the requirements for permit unit S-75-0-1. The record retention

time was changed from 2 years to 5 years to comply with District Rule 2520, 9.4.2.

m. Diesel Fired Engines (S-75-16-0, -17-0 and -18-0)

These permit units were subject to the District NSR Rule at the time the applicant applied for Authorities to Construct. In accordance with the White Paper for Streamlined Development of Part 70 Permit Applications, dated July 10, 1995, conditions from the resulting PTO's were addressed to define how NSR permit terms should be incorporated into the Title V permit.

- Condition 1 from the PTO's is included as permit condition 1 of the requirements for permit units S-75-16-1, -17-1, and -18-1.
- Condition 2 from the PTO's is included as permit condition 2 of the requirements for permit units S-75-16-1, -17-1, and -18-1.
- Condition 3 from the PTO's is included as permit condition 3 of the requirements for permit units S-75-16-1, -17-1, and -18-1.
- Condition 4 from the PTO's is included as permit condition 4 of the requirements for permit units S-75-16-1, -17-1, and -18-1.
- Condition 5 from the PTO's is included as permit condition 5 of the requirements for permit units S-75-16-1, -17-1, and -18-1.
- Condition 6 from the PTO's is included as permit condition 6 of the requirements for permit units S-75-16-1, -17-1, and -18-1.
- Condition 7 from the PTO's is included as permit condition 7 of the requirements for permit units S-75-16-1, -17-1, and -18-1.
- Condition 8 from the PTO's is included as permit condition 8 of the requirements for permit units S-75-16-1, -17-1, and -18-1.

n. Cooling Towers (S-75-19-0 and -20-0)

These permit units were subject to the District NSR Rule at the time the applicant applied for Authorities to Construct. In accordance with the White Paper for Streamlined Development of Part 70 Permit Applications, dated July 10, 1995, conditions from the resulting PTO's were addressed to define how NSR permit terms should be incorporated into the Title V permit.

- Condition 1 from the PTO's is included as permit condition 1 of the requirements for permit units S-75-19-1 and -20-1.
- Condition 2 from the PTO's is included as permit condition 2 of the requirements for permit units S-75-19-1 and -20-1.

o. Emergency Fuel Feed System (S-75-21-0)

This permit unit was subject to the District NSR Rule at the time the applicant applied for Authority to Construct. In accordance with the White Paper for Streamlined Development of Part 70 Permit Applications, dated July 10, 1995, conditions from the resulting PTO were addressed to define how NSR permit terms should be incorporated into the Title V permit.

- Condition 1 from the PTO is included as permit condition 1 of the requirements for permit unit S-75-21-1.
- Condition 2 from the PTO is included as permit condition 2 of the requirements for permit unit S-75-21-1.
- Condition 3 from the PTO is included as permit condition 3 of the requirements for permit unit S-75-21-1.
- Condition 4 from the PTO is included as permit condition 4 of the requirements for permit unit S-75-21-1.
- Condition 5 from the PTO is included as permit condition 5 of the requirements for permit unit S-75-21-1.
- Condition 6 from the PTO is included as permit condition 6 of the requirements for permit unit S-75-21-1. The record retention time of 2 years was removed and replaced with 5 years on condition 9 of permit unit S-75-0-1.

22. 40 CFR 52.21 PSD Permit SJ 90-01

USEPA PSD permit SJ 90-01 was issued/modified by Region IX on July 8, 1994. Conditions from this permit were addressed to define how permit terms should be incorporated into Title V permits S-75-6-15 and -11-12.

- Conditions I and II (Permit Expiration and Notification of Start-up) of the PSD permit have not been included in the requirements for the Title V permit. These construction phase requirements are now obsolete.
- Condition III (Facilities Operation) of the PSD permit is included as condition 64 of the requirements for permit unit S-75-6-15 and condition 58 of the requirements for permit unit S-75-11-12.
- Condition IV (Malfunction) of the PSD permit is included as condition 65 of the requirements for permit unit S-75-6-15 and condition 59 of the requirements for permit unit S-75-11-12.

- Condition V (Right to Entry) of the PSD is included as condition 66 of the requirements for permit unit S-75-6-15 and condition 60 of the requirements for permit unit S-75-11-12.
- Condition VI (Transfer of Ownership) of the PSD permit is included as condition 67 of the requirements for permit unit S-75-6-15 and condition 61 of the requirements for permit unit S-75-11-12.
- Condition VII (Severability) of the PSD permit is included as condition 68 of the requirements for permit unit S-75-6-15 and condition 62 of the requirements for permit unit S-75-11-12.
- Condition VIII (Other Applicable Regulations) of the PSD permit is included as condition 69 of the requirements for permit unit S-75-6-15 and condition 63 of the requirements for permit unit S-75-11-12.
- Condition IX (Special Conditions):

Start-up conditions have been satisfied and are therefore obsolete. Start-up conditions will not be included in the requirements for the Initial Title V permit.

Certification requirements required prior to or shortly after startup have been satisfied. Certification requirements will not be included in the requirements for the Initial Title V permit.

Continuous Monitoring section 2 requires that the permittee notifies EPA of the date upon which demonstration of the continuous monitoring system performance commences. This is a startup requirement and will not be included in the requirements for the Initial Title V permit.

Continuous Monitoring section 6 requires that not less than 90 days prior to the date of start-up of the Phase II boiler (S-75-11), the permittee shall submit to the EPA a quality assurance project plan for the certification and operation of the continuous emission monitors. This is a startup requirement and will not be included in the requirements for the Initial Title V permit.

Continuous Monitoring section 8 requires that upon start-up of Boiler II (S-75-11), the permittee shall coordinate with the Forest Service to provide funding for the maintenance and operation of a photography station within the Dome Land Wilderness Area for a period of years not to exceed \$5,000/yr. This is a startup requirement and will not be included in the requirements for the Initial Title V permit.

Fuel Use requires records of fuel use to be maintained and kept on site for at least two years following the date of their making. This requirement has been subsumed by condition 9 of the requirements for S-75-0-1.

The remaining special conditions have been included in conditions 70 through 100 of the requirements for permit unit –6-15 and conditions 64 through 94 of the requirements for permit unit –11-12.

- Condition X (Agency Notifications)

This condition has been included as condition 101 of the requirements for permit unit –6-15 and condition 95 of the requirements for permit unit –11-12.

## **X. STREAMLINING**

Streamlining of multiple requirements for permit units S-75-6-15 and S-75-11-12 is provided as follows:

### **1. 400 MMBtu/hr Biomass Fired Boiler (S-75-6-15)**

- a. Particulate Matter Emissions (S-75-6-15)



Step 1: Side-by-Side Comparison of Applicable Requirements

| Requirement             | 40 CFR 60 Subparts A & Db   | District Rule 4201     | District Rule 4301   | PTO (S-75-6-21)  | Proposed Requirement  |
|-------------------------|-----------------------------|------------------------|--|--|---|
| Emission Limit          | Sec. 60.43b – 0.10 lb/MMBtu | Sec -3.1 – 0.1 gr/dscf | Sec. 5.1 –<br>1) 0.1 gr/dscf @ 12% CO2<br>2) 10.0 lb/hr per boiler | Conditions 27 –<br>1. 0.01 gr/dscf @ 12% CO2<br>2. 17.74 lb/hr<br><br>Condition 32–<br>1. 425.8 lb/day | 1. 0.01 gr/dscf @ 12% CO2<br>2. 17.74 lb/hr<br>3. 10.0 lb/hr<br>4. 425.8 lb/day   |
| Work Practice Standards | None                        | None                   | None   | None   | None  |
| Monitoring              | None                        | None                   | None   | None   | Dust collection system shall be completely inspected annually for evidence of particulate matter breakthrough and repaired as needed.   |
| Record Keeping          | None                        | None                   | None   | None   | Records of dust collector maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. |
| Reporting               | None                        | None                   | None   | None   | None  |
| Test Methods            | EPA Methods – 3, 5, 17      | EPA Methods – 2, 4, 5  | EPA Methods - 5  | Condition 48 – EPA Methods 201(a) and 202  | EPA Methods 201(a) and 202  |

Step 2: Select Most Stringent Performance Standard

The proposed emission limits of 0.01 gr/dscf @ 12% O2, 10.0 lb/hr, 17.74 lb/hr and 425.8 lb/day are more stringent than all of the applicable requirements as can be seen below:

NSPS emission limit = 0.10 lb/MMBtu  
Maximum heat input of boiler = 400 MMBtu/hr

The mass emission rate is therefore  
= (0.10 lb/MMBtu) x (400 MMBtu/hr)  
= 40 lb/hr

This NSPS limit of 40 lb/hr is clearly less stringent than the proposed 10.0 lb/hr limit.

The proposed limit of 0.01 gr/dscf @ 12% CO<sub>2</sub> is more stringent than the District Rule 4201 limit of 0.1 gr/dscf and District Rule 4301 limit of 0.1 gr/dscf @ 12% CO<sub>2</sub>.

Both 17.74 lb/hr and 10 lb/hr limits will be included in the permit because 17.74 lb/hr is a NSR limit and cannot be removed during the Initial Title V permitting process.

Step 3: Conditions ensuring compliance with applicable requirement

Proposed conditions 27, 32, 48, 61, 63, and 103 of the requirements for permit unit (S-75-6-15) ensure compliance with the streamlined requirements.

Step 4: Compliance Certification

By signing the Compliance Certification Form (TVFORM-005), the applicant has certified compliance with the proposed set of streamlined conditions.

Step 5: Compliance Schedule

Not applicable.

Step 6: Permit Shield

Not applicable.

b. SOx Emissions (S-75-6-15)

Step 1: Side-by-Side Comparison of Applicable Requirements

| Requirement             | District Rule 4801                                    | District Rule 4301                 | PTO (S-75-6-21)   | Proposed Requirement   |
|-------------------------|---|------------------------------------|---|--|
| Emission Limit          | Sec 3.1 – 2000ppmv (0.2%by Volume, 15 minute average) | Sec. 5.2.1 - 200 lb/hr             | Condition 28 –<br>1. 23 ppmvd @ 3%O2<br>2. 15.66 lb/hr<br>Condition 32 –<br>1. 375.8 lb/day   | 1. 15.66 lb/hr<br>2. 23 ppmvd @ 3% O2<br>3. 375.8 lb/day   |
| Work Practice Standards | None  | None                               | Condition 22 - Limestone and/or onsite generated cooling tower sludge, shall be injected into boiler at a rate in pounds per ton of biomass fuel introduced into boiler which results in compliance with the SOx emission limitation. | Limestone and/or onsite generated cooling tower sludge, shall be injected into boiler at a rate in pounds per ton of biomass fuel introduced into boiler which results in compliance with the SOx emission limitation. |
| Monitoring              | None  | None                               | CEMS  | CEMS   |
| Record Keeping          | None  | None                               | None  | Retain CEMS data for 5 years per DR 2520, 9.4.2  |
| Reporting               | None  | None                               | None  | None   |
| Test Methods            | EPA Method – 8 & CARB Method 1-100                    | EPA Method – 8 & CARB Method 1-100 | Condition 53 – EPA Method 6 or CARB Method 100  | EPA Methods 1-4 and 6 or CARB Method 100   |

Step 2: Select Most Stringent Performance Standard

The proposed emissions limits of 15.66 lb/hr, 23 ppmvd @ 3%O2, and 375.8 lb/day are more stringent than all of the applicable requirements as can be seen below:

District Rule 4801 limits SOx emissions to 0.2% by volume, or 2000 ppmvd. The proposed requirement of 23 ppmvd is clearly more stringent.

District Rule 4301 limits SOx emissions to 200 lb/hr. The proposed requirement of 15.66 lb/hr is clearly more stringent.

Step 3: Conditions ensuring compliance with applicable requirement

Proposed conditions 22, 28, 32, 48, 54, 76, and 82 of the requirements for permit unit S-75-6-15 and condition 9 of the facility-wide requirements ensure compliance with streamlined requirement.

Step 4: Compliance Certification

The signed Title V Permit Application form (TVFORM-005) submitted for this facility contains proposed permit condition addressing the requirement.

Step 5: Compliance Schedule

Not applicable.

Step 6: Permit Shield

Not applicable.

c. NOx Emissions (S-75-6-15)

Step 1: Side-by-Side Comparison of Applicable Requirements

| Requirement             | District Rule 4301                  | District Rule 4352                                      | PTO (S-75-6-21)   | Proposed Requirement   |
|-------------------------|-------------------------------------|---|---|--|
| Emission Limit          | Sec 5.2.2 -140 lb/hr                | Sec. 5.1 – -0.35 lb/MMBtu (24 hr averaging period)      | Condition 29 –<br>1. 40.00 lb/hr<br>2. 0.10 lb/MMBtu<br>Condition 32 –<br>1. 960.0 lb/day   | 1. 40.00 lb/hr<br>2. 0.10 lb/MMBtu<br>3. 960.0 lb/day  |
| Work Practice Standards | None                                | None  | Condition 23 – Ammonia shall be injected into boiler at a rate, in pounds per ton of biomass fuel introduced into boiler, which results in compliance with the NOx emission limitation. | Ammonia shall be injected into boiler at a rate, in pounds per ton of biomass fuel introduced into boiler, which results in compliance with the NOx emission limitation. |
| Monitoring              | None                                | CEMS  | CEMS  | CEMS   |
| Record Keeping          | None                                | Sec. 5.5, 6.2 – Retain CEMS and Fuel data for two years | None  | Retain CEMS and fuel data for 5 years per DR 2520, 9.4.2   |
| Reporting               | None                                | None  | None  | None   |
| Test Methods            | EPA Method – 2, 4 & CARB Method-100 | EPA Method – 7E & CARB Method 100                       | Condition 48 – EPA Method 7 or CARB Method 100  | EPA Methods 7 or CARB Method 100   |

Step 2: Select Most Stringent Performance Standard:

The proposed emissions limits of 40.00 lb/hr, 0.10 lb/MMBtu, and 960.0 lb/day are more stringent than all of the applicable requirements as can be seen below:

District Rule 4301 limits NOx emissions to 140 lb/hr. The proposed requirement of 40.00 lb/hr is clearly more stringent.

District Rule 4352 limits NOx emissions to 0.35 lb/MMBtu. The proposed requirement of 0.10 lb/MMBtu is more stringent than the District Rule 4352 emission limit.

Step 3: Conditions ensuring compliance with applicable requirement

Proposed conditions 23, 29, 32, 48, 54, and 82 of the requirements for permit unit S-75-6-15 and condition 9 of the facility-wide requirements ensure compliance with streamlined requirement.

Step 4: Compliance Certification

The signed Title V Permit Application form (TVFORM-005) submitted for this facility contains proposed permit condition addressing the requirement.

Step 5: Compliance Schedule

Not applicable.

Step 6: Permit Shield

Not applicable.

d. CO Emissions (S-75-6-15)

Step 1: Side-by-Side Comparison of Applicable Requirements

| Requirement             | District Rule 4352  | PTO (S-75-6-21)   | Proposed Requirement   |
|-------------------------|---|---|--|
| Emission Limit          | 400 ppmv @ 3% O <sub>2</sub> ,<br>310 ppmv at 7% O <sub>2</sub> ,<br>or 310 ppmv @ 12% O <sub>2</sub>               | Condition 31 –<br>1. 181 ppmvd @ 3% O <sub>2</sub><br>2. 56.00 lb/hr<br>Condition 32 –<br>1. 1344.0 lb/day  | 1. 181 ppmvd @ 3% O <sub>2</sub><br>2. 56.00 lb/hr<br>3. 1344.0 lb/day   |
| Work Practice Standards | Heat may be supplied by liquid or gaseous fuel during startup, shutdown and other combustion stabilization periods. | Condition 13 –<br>Only PUC quality natural gas, biomass, sand, limestone, ammonia, air, MgO, MgOH and on-site generated dewatered cooling tower sludge shall be introduced into boiler. | Only PUC quality natural gas, biomass, sand, limestone, ammonia, air, MgO, MgOH and on-site generated dewatered cooling tower sludge shall be introduced into boiler |
| Monitoring              | CEMS  | CEMS  | CEMS   |
| Record Keeping          | Sec. 5.5, 6.2 - Retain CEMS and Fuel data for two years   | None  | Retain CEMS and fuel data for five years per DR 2520, 9.4.2  |
| Reporting               | None  | None  | None   |
| Test Methods            | EPA Method – 10 or CARB Method 100  | Condition 48 –<br>EPA Method 10 or CARB Method 100  | EPA Methods 10 or CARB Method 100  |

Step 2: Select Most Stringent Performance Standard

The proposed emissions limits of 56.0 lb/hr, 181 ppmvd @ 3%O<sub>2</sub>, and 1344 lb/day are more stringent than all of the applicable requirements as can be seen below:

District Rule 4352 limits CO emissions to 400 ppmv @ 3% O<sub>2</sub>. The proposed requirement of 181 ppmvd is clearly more stringent than the Rule 4352 requirement.

Step 3: Conditions ensuring compliance with applicable requirement

Proposed conditions 13, 31, 32, 48, 54, and 82 of the requirements for permit unit S-75-6-15 and condition 9 of the facility-wide requirements ensure compliance with streamlined requirements.

Step 4: Compliance Certification

The signed Title V Permit Application form (TVFORM-005) submitted for this facility contains proposed permit condition addressing the requirement.

Step 5: Compliance Schedule

Not applicable.

Step 6: Permit Shield

Not applicable.

## 2. 315 MMBtu/hr Biomass Fired Boiler (S-75-11-12)

### a. Particulate Matter Emissions (S-75-11-12)

#### Step 1: Side-by-Side Comparison of Applicable Requirements

| Requirement             | 40 CFR 60 Subparts A & Db   | District Rule 4201     | District Rule 4301   | PTO (S-75-11-18)  | Proposed Requirement  |
|-------------------------|-----------------------------|------------------------|--|---|---|
| Emission Limit          | Sec. 60.43b – 0.10 lb/MMBtu | Sec -3.1 – 0.1 gr/dscf | Sec. 5.1 –<br>1. 0.1 gr/dscf @ 12% CO2<br>2. 10.0 lb/hr per boiler | Conditions 26 –<br>1. 0.045 lb/MMBtu<br>2. 14.08 lb/hr<br>Condition 31 –<br>1. 337.9 lb/day | 1. 0.045 lb/MMBtu<br>2. 14.08 lb/hr<br>3. 337.9 lb/day<br>4. 10.0 lb/hr   |
| Work Practice Standards | None                        | None                   | None   | Condition 4 – Boiler exhaust shall be served by fabric collector.                           | Boiler exhaust shall be served by fabric collector.   |
| Monitoring              | None                        | None                   | None   | None  | Dust collection system shall be completely inspected annually for evidence of particulate matter breakthrough and repaired as needed.   |
| Record Keeping          | None                        | None                   | None   | None  | Records of dust collector maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. |
| Reporting               | None                        | None                   | None   | None  | None  |
| Test Methods            | EPA Methods – 3, 5, 17      | EPA Methods – 2, 4, 5  | EPA Methods - 5  | Condition 47 – EPA Methods 201(a) and 202   | EPA Methods 201(a) and 202  |



### Step 2: Select Most Stringent Performance Standard

The proposed emissions limits of 0.045 lb/MMBtu, 10.0 lb/hr, and 337.9 lb/day are more stringent than all of the applicable requirements as can be seen below:

NSPS emission limit = 0.10 lb/MMBtu  
Maximum heat input of boiler = 315 MMBtu/hr

The mass emission rate is therefore =  $(0.10 \text{ lb/MMBtu})(315 \text{ MMBtu/hr}) = 31.5 \text{ lb/hr}$

This NSPS limit of 31.5 lb/hr is clearly less stringent than the proposed 10.0 lb/hr limit.

The proposed limit of 10.0 lb/hr is more stringent than the District Rule 4201 limit of 0.1 gr/dscf and 4301 0.1 gr/dscf @ 12% CO<sub>2</sub> as demonstrated below (see project C-1001504):

Emission factor: 10.0 lb-PM/hr  
f-Factor: 9,570 dscf/MMBtu  
(40 CFR 60 Appendix A, Method 19)

Rating: 315 MMBtu/hr

Exhaust volume =  $(315 \text{ MMBtu/hr}) \times (9,570 \text{ dscf/MMBtu})$   
= 3,015,550 dscf/hr  
Grain Loading =  $10.0 \text{ lb/hr} \times 7000 \text{ gr/lb} \times 1 \text{ hr} / 3,015,550 \text{ dscf}$   
= **0.0232 gr/dscf**

Therefore, even with no excess air, the grain loading is less than 0.1 gr/dscf.

Both 14.08 lb/hr and 10.0 lb/hr limits will be included in the permit because 14.08 lb/hr is a NSR limit and cannot be removed during the Title V permitting process.

### Step 3: Conditions ensuring compliance with applicable requirement

Proposed conditions 4, 26, 31, 46, 97, 98, and 99 of the requirements for permit unit S-75-11-12 ensure compliance with the streamlined requirements.

#### Step 4: Compliance Certification

By signing the Compliance Certification Form (TVFORM-005), the applicant has certified compliance with the proposed set of streamlined conditions.

#### Step 5: Compliance Schedule

Not applicable.

#### Step 6: Permit Shield

Not applicable.

#### b. SOx Emissions (S-75-11-12)

#### Step 1: Side-by-Side Comparison of Applicable Requirements

| Requirement             | District Rule 4801                                    | District Rule 4301                 | PTO (S-75-11-18)  | Proposed Requirement   |
|-------------------------|---|------------------------------------|---|--|
| Emission Limit          | Sec 3.1 – 2000ppmv (0.2%by Volume, 15 minute average) | Sec. 5.2.1 - 200 lb/hr             | Condition 27 –<br>1. 23 ppmvd @ 3%O2<br>2. 12.09 lb/hr<br>Condition 31 –<br>1. 290.2 lb/day   | 1. 12.09 lb/hr<br>2. 23 ppmvd @ 3% O2<br>3. 290.2 lb/day   |
| Work Practice Standards | None  | None                               | Condition 22 - Limestone and/or onsite generated cooling tower sludge, shall be injected into boiler at a rate in pounds per ton of biomass fuel introduced into boiler which results in compliance with the SOx emission limitation. | Limestone and/or onsite generated cooling tower sludge, shall be injected into boiler at a rate in pounds per ton of biomass fuel introduced into boiler which results in compliance with the SOx emission limitation. |
| Monitoring              | None  | None                               | CEMS  | CEMS   |
| Record Keeping          | None  | None                               | None  | Retain CEMS and fuel data for 5 years per DR 2520, 9.4.2   |
| Reporting               | None  | None                               | None  | None   |
| Test Methods            | EPA Method – 8 & CARB Method 1-100                    | EPA Method – 8 & CARB Method 1-100 | Condition 47 – EPA Method 6 or CARB Method 100  | EPA Method 6 or CARB Method 100  |

### Step 2: Select Most Stringent Performance Standard

The proposed emissions limits of 12.09 lb/hr, 23 ppmvd @ 3%O<sub>2</sub>, and 290.2 lb/day are more stringent than all of the applicable requirements, as can be seen below:

District Rule 4801 limits SO<sub>x</sub> emissions to 0.2% by volume, or 2000 ppmvd. The proposed requirement of 23 ppmvd is clearly more stringent.

District Rule 4301 limits SO<sub>x</sub> emissions to 200 lb/hr. The proposed requirement of 12.09 lb/hr is clearly more stringent.

### Step 3: Conditions ensuring compliance with applicable requirement

Proposed conditions 22, 27, 31, 46, 52, and 76 of the requirements for permit unit S-75-11-12 ensure compliance with streamlined requirement.

### Step 4: Compliance Certification

The signed Title V Permit Application form (TVFORM-005) submitted for this facility contains proposed permit condition addressing the requirement.

### Step 5: Compliance Schedule

Not applicable.

### Step 6: Permit Shield

Not applicable.

c. NOx Emissions (S-75-11-12)

Step 1: Side-by-Side Comparison of Applicable Requirements

| Requirement             | District Rule 4301                  | District Rule 4352                                      | PTO (S-75-11-18)  | Proposed Requirement   |
|-------------------------|-------------------------------------|---|---|--|
| Emission Limit          | Sec 5.2.2 -140 lb/hr                | Sec. 5.1 – -0.35 lb/MMBtu (24 hr averaging period)      | Condition 28 –<br>1. 31.50 lb/hr<br>2. 0.10 lb/MMBtu<br>Condition 31 –<br>1. 756.0 lb/day   | 1. 31.50 lb/hr<br>2. 0.10 lb/MMBtu<br>3. 756.0 lb/day  |
| Work Practice Standards | None                                | None  | Condition 23 – Ammonia shall be injected into boiler at a rate, in pounds per ton of biomass fuel introduced into boiler, which results in compliance with the NOx emission limitation. | Ammonia shall be injected into boiler at a rate, in pounds per ton of biomass fuel introduced into boiler, which results in compliance with the NOx emission limitation. |
| Monitoring              | None                                | CEMS  | CEMS  | CEMS   |
| Record Keeping          | None                                | Sec. 5.5, 6.2 - Retain CEMS and Fuel data for two years | None  | Retain CEMS and fuel data for 5 years per DR 2520, 9.4.2   |
| Reporting               | None                                | None  | None  | None   |
| Test Methods            | EPA Method – 2, 4 & CARB Method-100 | EPA Method – 7E & CARB Method 100                       | Condition 47 – EPA Method 7 or CARB 100   | EPA Methods 7 or CARB Method 100   |

Step 2: Select Most Stringent Performance Standard:

The proposed emissions limits of 31.50 lb/hr, 0.10 lb/MMBtu, and 756.0 lb/day are more stringent than all of the applicable requirements as can be seen below:

District Rule 4301 limits NOx emissions to 140 lb/hr. The proposed requirement of 31.50 lb/hr is clearly more stringent.

District Rule 4352 emission limit = 0.35 lb/MMBtu  
Maximum heat input of boiler = 315 MMBtu/hr

The mass emission rate is therefore = (0.35 lb/MMBtu)(315 MMBtu/hr) = 110.3 lb/hr

The proposed requirement of 31.50 lb/hr is more stringent than the District Rule 4352 emission limit. This can be seen in Section IX. Compliance, under District Rule 4352.

Step 3: Conditions ensuring compliance with applicable requirement

Proposed conditions 23, 28, 31, 46, 52, and 76 of the requirements for permit unit S-75-11-12 and condition 9 of the facility-wide requirements ensure compliance with streamlined requirement.

Step 4: Compliance Certification

The signed Title V Permit Application form (TVFORM-005) submitted for this facility contains proposed permit condition addressing the requirement.

Step 5: Compliance Schedule

Not applicable.

Step 6: Permit Shield

Not applicable.

d. CO Emissions (S-75-11-12)

Step 1: Side-by-Side Comparison of Applicable Requirements

| Requirement             | District Rule 4352  | PTO (S-75-11-18)  | Proposed Requirement  |
|-------------------------|---|---|---|
| Emission Limit          | 400 ppmv @ 3% O <sub>2</sub> ,<br>310 ppmv at 7% O <sub>2</sub> ,<br>or 310 ppmv @ 12% O <sub>2</sub>               | Condition 30 –<br>1. 183 ppmvd @<br>3% CO <sub>2</sub><br>2. 44.10 lb/hr<br>Condition 31 –<br>1. 1058.4 lb/day  | 1. 44.10 lb/hr<br>2. 183 ppmvd @<br>3% CO <sub>2</sub><br>3. 1058.4 lb/day  |
| Work Practice Standards | Heat may be supplied by liquid or gaseous fuel during startup, shutdown and other combustion stabilization periods. | Condition 13 –<br>Only PUC quality natural gas, biomass, sand, limestone, ammonia, air, MgO, MgOH and on-site generated dewatered cooling tower sludge shall be introduced into boiler. | Only PUC quality natural gas, biomass, sand, limestone, ammonia, air, MgO, MgOH and on-site generated dewatered cooling tower sludge shall be introduced into boiler. |
| Monitoring              | CEMS  | CEMS  | CEMS  |
| Record Keeping          | Sec. 5.5, 6.2 - Retain CEMS and Fuel data for two years   | None  | Retain CEMS and fuel data for five years per DR 2520, 9.4.2   |
| Reporting               | None  | None  | None  |
| Test Methods            | EPA Method 10 or CARB Method 100  | Condition 47 –<br>EPA Method 10 or CARB Method 100  | EPA Method 10 or CARB Method 100  |

Step 2: Select Most Stringent Performance Standard:

The proposed emissions limits of 44.1 lb/hr, 183 ppmvd @ 3% O<sub>2</sub>, and 1058.4 lb/day are more stringent than all of the applicable requirements as can be seen below:

District Rule 4352 limits CO emissions to 400 ppmv @ 3% O<sub>2</sub>. The proposed requirement of 183 ppmvd @ 3% O<sub>2</sub> is clearly more stringent than the Rule 4352 requirement.

Step 3: Conditions ensuring compliance with applicable requirement

Proposed conditions 13, 30, 31, 46, 52, and 76 of the requirements for permit unit S-75-11-12 and condition 9 of the facility-wide requirements ensure compliance with streamlined requirements.

Step 4: Compliance Certification

The signed Title V Permit Application form (TVFORM-005) submitted for this facility contains proposed permit condition addressing the requirement.

Step 5: Compliance Schedule

Not applicable.

Step 6: Permit Shield

Not applicable.

## **XI. PERMIT CONDITIONS**

See final permit conditions beginning on the following page.

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## **ATTACHMENT A - DETAILED FACILITY PRINTOUT**



**ATTACHMENT B - INSIGNIFICANT ACTIVITIES OR  
EQUIPMENT**

The following exempt equipment was identified by the applicant on TVFORM-003, Insignificant Activities.

| <b>Exemption Category</b>  | <b>Rule 2020 Citation</b> |   |
|--|---------------------------|---|
| Brazing, soldering, or welding equipment.  | 5.10.1                    | ✓ |
| Containers used to store petroleum distillates used as motor fuel with specific gravity $\geq 0.8251$ .  | 5.7.7                     | ✓ |
| Containers used to store refined lubricating oils.   | 5.7.8                     | ✓ |
| Unvented pressure vessels used exclusively to store liquefied gases or associated with exempt equipment.   | 5.7.9 or 5.10.4           | ✓ |
| Equipment used exclusively for the transfer of refined lubricating oil.  | 5.8.2                     | ✓ |
| Unheated, non-conveyorized degreasers $< 10 \text{ ft}^2$ open area; using solvents with initial boiling point $\geq 248 \text{ F}$ ; and $< 25 \text{ gal/yr}$ evaporative losses.                    | 5.9.2                     | ✓ |
| Fugitive emissions sources and pressure vessels associated with an emissions unit for which a written permit is required are included as part of the emissions unit, a separate permit is not require. | 5.10.5                    | ✓ |
| Pits and Ponds as defined in Rule 1020.  | 5.10.6                    | ✓ |
| Non-structural repairs & maintenance to permitted equipment.   | 4.2.6                     | ✓ |
| Portable emissions units with valid registration (Rule 2280) and not subject to Title V (Rule 2520)  | 5.11                      | ✓ |

## **ATTACHMENT C - CURRENT PTOs**

## **ATTACHMENT D – PSD PERMITS**

## **ATTACHMENT E – PUBLIC COMMENTS**

Public comments regarding the District's analysis and preliminary decision were submitted by Our Children's Earth (OCE). A copy of the September 30, 2002 letter containing these comments is available at the District.

### **AES Delano (S-75) Comments**

***OCE Comment #1:*** *No Statement of Basis was included in the Draft Permit. The limited information provided in the Permit Application Review is inadequate.*

*According to 40 CFR § 70.7(a)(5), the District must provide a statement that sets forth the legal and factual basis for the draft permit conditions, including references to the applicable statutory and regulatory provisions. While this regulation is ambiguous as to whether the State of Basis must be included as part of the Draft Permit, we believe that it should be.*

*As you know, the purpose of the Statement of Basis is to provide an explanation of why the permit contains the provisions it does and why it does not contain other provisions that might otherwise be applicable. In other words, the Statement should set out the factual context for the Permit requirements. Along with the Permit Application, it provides a "background" for both decisions made by the District as well as efforts at meaningful public review.*

*Without the Statement of Basis, effective public review is hindered. It makes sense that the District would incorporate the full Statement of Basis into Draft Permit so as to facilitate public review. Maintaining the Statement of Basis as a separate document, kept at the District Office makes one more document for interested parties to request. The practice of not incorporating the District's analysis of the legal and factual basis for Permit actions into the Draft Permit itself implies to interested parties that all the information needed to effectively review or consult a Permit is contained within the Permit itself. This is simply not so.*

*As written, the Draft Permit contains little in the way of factual information about the Delano facility's operations. The Permit Application Review references an Attachment (the Detailed Facility Printout) for a list of permitted equipment. This list is of limited usefulness as a tool for the public to comprehend the facilities operations. The Detailed Facility Printout simply gives a very brief description of particular pieces of equipment. It does not list the emissions that come from that particular piece of equipment and leaves the non-expert public in the position of guessing as to even the most general functional aspects of a facility's operation. With the information as offered in the Detailed Facility Printout, the interested public cannot be expected to adequately understand what type of facility is being permitted, what type of equipment is being used and for what processes, and what emissions are resulting. We believe the District should incorporate into its Statement of Basis, a much more lucid explanation of the*

*facility, its emissions sources and abatement equipment, and its overall operational/manufacturing processes.*

*While descriptions of the facility and its process are contained in the permit application, they should be incorporated into the Draft Permit, as part of the Statement of Basis, not a mere list, included as an attachment. By including the legal and factual basis for the District's Draft Permit actions (including a detailed description of the facility, its emissions sources and abatement equipment, and its operational process), the Draft Permit moves closer to becoming a clear, comprehensive and informative document. Such a comprehensive Draft Permit will allow interested parties to effectively review what type of facility is being permitted, the applicable requirements and the reasons for those requirements upon which comments can be based.*

**District Response:** Each draft permit condition also includes a rule reference that identifies the underlying rule or regulation for each condition and a comprehensive equipment description is included in the permit for each permit unit. (e.g., EMERGENCY FIRE WATER PUMP POWERED BY 244 HP CUMMINS DIESEL-FIRED INTERNAL COMBUSTION ENGINE EQUIPPED WITH TURBOCHARGER, INTERCOOLER AND POSITIVE CRANKCASE VENTILATION). The application review further describes what type of facility is being permitted, the applicable requirements including a specific description of how compliance with each applicable requirement is assured in the permit, and the reasons for those requirements upon which comments can be based.

The federal Title V regulations in 40 CFR part 70.6, which are very prescriptive with regards to permit content, do not include provisions for including the statement of basis in the draft permit as you recommend. Including the full statement of basis in the Title V permit would unnecessarily make the permit more complex and less understandable. The application review, which acts as a statement of basis, is provided to the public free of charge upon request along with the draft permit, so there is no reason for incorporating the application review into the draft V permit.

Other more detailed information about the facility that the applicant is required to provide as part of a Title V permit application package (emissions, certifications, etc.) is also available upon request

**OCE Comment #2:** *Insufficient Emergency Provisions.*

*Facility-Wide Requirement 1, under AES Delano's draft permit, link the term "breakdown" to the definitions provided in District Rule 1100. However, the definition of "breakdown" in Rule 1100 is significantly different from the federal definition of a breakdown, which is provided in the U.S. Environmental Protection Agency's (EPA's) regulation for State Operating Permit Programs (40 CFR Part 70). In 40 CFR 70.6(g), EPA clearly defines emergencies as arising from, "sudden and reasonably*

*unforeseeable events...which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation..." The District's definition does not contain this language and therefore does not fulfill the requirements of the Clean Air Act (CAA). Regarding emergency provisions, we believe that the language of the Title V Draft Permit should follow the language provided in the federal regulation very closely, if not word-for-word.*

**District Response:** Section 13.4.2 of Rule 2520 states that provisions of District Rule 1100 (Breakdowns) apply in addition to the provisions of that section. The purpose of facility wide requirement 1 is to assure compliance with the requirements of District Rule 1100 and to compel prompt reporting. This reporting, however, does not grant facilities an affirmative defense unless the provisions listed under Section 13.4.1 which are identical to those listed under 40 CFR 70.6(g). Facility wide requirement 1 assures compliance with District Rule 1100 without contradicting federal requirements. Therefore, the breakdown provisions of the proposed permit are consistent with the requirements of the District's approved Title V program and are not insufficient.

**OCE Comment #3:** *Facility-Wide Requirement 1 is unclear and does not accurately reflect the substantive content of the District Rule it is based on.*

*Facility-Wide Requirement 1 requires the owner/operator to "notify the District, of any breakdown conditions as soon as reasonably possible." This Requirement provides for notification no later than hour after detection. While this is sufficiently clear to compel prompt notification, the exact substantive information necessary in such notification is not included in Requirement 1. San Joaquin Valley APCD District Rule 1100, 6.1 states such notification shall identify the time, specific location, equipment involved, and to the extent known, the cause of the breakdown condition. Although these details also need to be reported in the subsequent written notification of correction, due ten days later, District Rule 1100, 6.1 requires them in the initial notification as well. Facility Wide Requirement 1 should include the listed requirements of District Rule 1100, 6.1.*

*If the Permit is to function effectively as an enforcement tool, the requirements within, particularly those that deal with the monitoring of emissions and the reporting of instances of excess emissions, must be clear. Ambiguity in the Permit Requirements can allow a facility to claim ignorance of the full range of applicable details in such requirement and when that occurs, details and facts are lost and effective monitoring a facility's record of breakdowns and excessive emissions is hindered.*

**District Response:** Facility-wide condition 1 requires that the source notify the District of a breakdown within 1 hour after detection (unless that owner or operator can satisfactorily demonstrate that a longer period was necessary) as required by District Rule 1100. Upon notification, District compliance staff require that source operators provide the specific information required by District Rule 1100, as well as any other information necessary to determine compliance with rule requirements. The



information required includes: the source name and location; the date and time of the breakdown; the date and time of the report; the name of the person notifying the District of the breakdown; the description and permit number for the equipment involved; the permit number; and the nature of the breakdown including, if known, the cause. So, condition 1 of the draft permit does provide for compliance with the District rule on which it is based. Additionally, condition 2 requires all details to be submitted in writing subsequently.

***OCE Comment #4: Insufficient Monitoring/Reporting Requirements.***

*Facility-Wide Requirement 10 in AES Delano's Draft Permit states that the operator shall submit reports of any required monitoring at least every six months. The Draft Permit should be absolutely clear about what monitoring requirements must be covered in the 6 month monitoring reports. Facility-Wide Requirement 10 is not sufficiently clear.*

*We suggest the following language: "The source is required to comply with the following monitoring requirements and include such reports in the six month monitoring reports." Such language is necessary to ensure that the District, U.S. EPA, permit holder and the public are aware of the monitoring and reporting requirements in the permit. This language would then need to be followed by a precise list if the applicable monitoring and reporting requirements.*

*Finally, the District incorrectly cites District Rule 2520, 9.6.1 as the applicable rule requiring 6 month monitoring reports. Instead, District Rule 2520, 9.5.1 is the proper rule.*

**District Response:** All applicable monitoring requirements are already included in the proposed permit and can be readily identified by reviewing the conditions for each permit unit, so the monitoring and reporting requirements in the draft permit are not insufficient. The "precise list" of monitoring requirements that you recommend we add to condition 10 would be redundant.

The section numbers in the draft permit were based on a previous version of District Rule 2520. The numbers will be updated to reflect the current version at the time of final action.

***OCE Comment #5: Lack of "Practically Enforceable" Conditions.***

*According to the CAA, conditions in a Title V permit must be "practically enforceable." Therefore a permit requirement must make it possible to determine whether the facility is complying with the condition. Specifically, all Title V Major Facility Review Permits are legally required to incorporate all applicable record keeping requirements, and, where applicable, records of required monitoring must include the following:*

- 1) *The date, time, and place of sampling or measurements;*
- 2) *The dates analyses were performed;*
- 3) *The company or entity that performed the analyses;*
- 4) *The analytical techniques or methods used;*
- 5) *The results of such analyses; and*
- 6) *The operating conditions existing at the time of sampling or measurement.*

*40 CFR 70.6(a)(3)(ii)(A); District Rule 2520, 9.4.1. Reports of all required monitoring must be submitted at least every six months. Reports are required to identify all instances of deviations from permit requirements and must be certified by a responsible official. See 40 CFR 70.6(a)(3)(iii)(A); District Rule 9.13.1 and 10.0. Facility-Wide Requirements 23-27 and 29-34 under AES Delano's Draft Permit did not include any monitoring and reporting requirements to determine whether the facility is in compliance with Facility-Wide Requirements 23-27 and 29-34. Thus, Facility-Wide Requirements 23-27 and 29-34 are not "practically enforceable" because there is no way to determine whether the facility is in compliance with those conditions.*

**District Response:** Facility-wide conditions 23-27 and 29-34 include general requirements (e.g., labeling requirements for any containers used for architectural coatings) that may apply to certain insignificant activities that could occur at the facility (e.g., a temporary architectural coating operation exempt from permitting requirements under Section 6.8.1 of District Rule 2020). These types of operations that are exempt from permitting were designated in the District's approved Title V program as insignificant. These requirements are practically enforceable in the permit as written. The source is still required to report deviations from these requirements under Facility wide condition 11, and to certify compliance with each of these requirements annually under condition 35. The annual certification must include the identification of the permit term, the compliance status, the method the source operator used to determine the compliance status, and any other facts required by the district to determine the compliance status. Also, if a violation were observed during an EPA or District inspection (e.g., an uncovered can of house paint was found at the facility), enforcement action could still be taken. However, permit modifications/additions will be required if the facility were to begin conducting these activities in a manner or at a level that required a permit (a level not exempt under Rule 2020). Specific monitoring requirements would be added at the time the operation was permitted.

**OCE Comment #6:** *Legal Insufficiency of the Schedule of Compliance Section.*

*All Title V permits are legally required to contain a compliance schedule as follows: 1) for applicable requirements with which the source is in compliance, a statement that the source will continue to comply with such requirements; 2) for applicable future requirements that will become effective during the permit term, a statement that the*

*source will comply with such requirements on a timely basis; 3) a schedule of compliance for sources that are not in compliance with all applicable requirements at the time of permit issuance, including a schedule of remedial measures with an enforcement sequence of actions leading to compliance. 40 CFR 70.6(c)(3); and 70.5(c)(8)(iii)(A), (B), and (C); District Rule 2520, 9.8.1<sup>1</sup>, 9.13.1, and 9.14. In addition to the schedule of compliance, all Title V permits are required to contain a statement of compliance. District Rule 2520, 10.0.*

*The schedule of compliance section, in the relevant part, reads as follows:*

*The permittee must comply with all conditions of the permit including permit revisions originated by the District.....*

*This statement is legally insufficient. The specific contents of a compliance schedule are determined by the status of a source's compliance at the time the permit is issued. For example, if a source is currently in compliance, the compliance schedule must state that the source will "continue to comply." If there are future requirements, the schedule must state that the source must comply with them on a timely basis. If the source is not in compliance, the schedule should include a plan for the source to come into compliance.*

*The schedule of compliance section presented in the proposed permits, identified above, does not indicate the sources' current status of compliance, nor is a statement of compliance presented elsewhere in the facilities' permits. The schedule also lacks the following components: 1) a statement that the sources will "continue to comply," 2) whether there are future requirements that will become effective during a specific permit's term, 3) language that the source must comply with future requirements "on a timely basis," should the source be out of compliance, 4) a schedule of remedial measures and actions the source must take to come into compliance. These above omissions are inconsistent with federal law and District regulation.*

*One of the purposes of the Title V permitting program was to enable the public, sources, the state, and EPA to better understand a source's requirements under its permit and whether the source is meeting those requirements. Operating Permit Program, 57 Fed.Reg. 32,295 (1992). The District's failure to include the legally required information in the schedules of compliance defeats this purpose, and strips the schedules of their practical use.*

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<sup>1</sup> Note: The District has again incorrectly cited District Rule 2520, 9.9.1 under condition 5 in AES Delano's permit that we are commenting on in this letter. The correct District Rule is Rule 2520, 9.8.1.

*In fact, the above language used in each of the proposed permits is a blanket statement that the District used for all of its Title V permits. As stated, such a blanket statement is legally insufficient and of no practical use.*

*The reader should not be required to infer that a source is in compliance simply by the District's omission of contrary language. In fact, in some instances such an inference may be incorrect.*

**District Response:** In accordance with section 9.14 of District Rule 2520, a compliance schedule is required "for sources in violation of any applicable requirement". This source certified compliance with the applicable requirements in their initial application, and compliance with each applicable requirement was demonstrated in the Compliance section of the application review. Therefore, a compliance schedule was not required for this permit.

In addition to a compliance schedule "for sources in violation of any applicable requirement", section 9.14 of Rule 2520 also requires a statement that the sources will continue to comply. This is addressed in condition 5, which requires that the permittee comply with all conditions of the permit including any revisions originated by the District. Because applicable requirements with future effectiveness dates are included as permit terms, the permit also assures that the permittee will comply with requirements with future effectiveness dates, as required by Section 9.14.3 of Rule 2520. Therefore, the condition is legally sufficient to satisfy the requirements of Section 9.14 of Rule 2520.

**OCE Comment #7:** *Facility-Wide Requirement 2 is unclear and does not accurately reflect the substantive content of the District Rule it is based on*

*Facility-Wide Requirement 2 describes the written notification due ten days after the correction of any breakdown condition and mandates inclusion of "the date and cause of the initial failure". San Joaquin Valley APCD District Rule 1100, 7.02 mandates inclusion of a "specific statement of the reason(s) or cause(s) for the occurrence sufficient to enable the APCO to determine whether the occurrence was a breakdown condition". Furthermore, District Rule 1100, 7.01 requires "a statement that the breakdown condition has been corrected, together with date of correction and proof of compliance."*

*We believe this precise language should be included in the Permit. Reports of breakdown conditions should be as accurate and detailed as possible in order that the District can effectively analyze them. Also, a facility's track record for "breakdowns" and "emergency emissions" in excess of those allowed by law is important in the eyes of the concerned public. Imagine a series of "breakdown conditions" at a facility, the causes of which are reported to the District as simply "operator error(s)". This vague description of the cause of the breakdown may allow important details or patterns of behavior to go unnoticed by the District or the public. If a facility is clearly aware that*

*more specific information is expected and if it is indeed included, the District will easily be able discern patterns of excess emissions and breakdowns. These detailed reporting requirements, which mandate a "specific statement" of reasons or causes, could elucidate shortcomings at a facility. For instance, there may exist a potential need for further training, more education for the facility's employees, and the correction technical problems in order to avoid future incidents, especially when compared with the facility's submitted work practices and standards and Risk Management Plan.*

**District Response:** Facility-wide permit condition 2 requires that the notification occur within 10 days after the correction is made and include the description of the equipment involved in the malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods used to restore normal operation. We believe the requirement for "the date and cause of the initial failure" requires exactly the type of "specific statement of reasons or causes" that you recommend should be added to the permit condition. Furthermore, District compliance staff investigate each breakdown notification, obtain any additional information necessary, and either accept the breakdown or issue a notice of violation. In addition to the notification, the breakdown investigation report prepared by the District inspector also becomes part of the public record of the incident. We believe that having the breakdown notification and the breakdown investigation report provides a very good record of each breakdown incident, and the requirements do accurately reflect the substantive requirements of the rule.

**OCE Comment #8:** *Facility-Wide Requirements 10, 11, 12, 16, 18, 19, 20, 21 and 35 reference the wrong corresponding District Rules*

*Facility-Wide Requirement 10 denotes the requirements regarding the frequency of monitoring reports. San Joaquin Valley APCD District Rule 2520, 9.6.1 is referenced as the corresponding District Rule. District Rule 2520, 9.6.1 explains that emissions authorized by allowances under the acid rain program are excepted from this requirement. The proper corresponding District Rule is 2520, 9.5.1.*

*Facility-Wide Requirement 11 provides details for the prompt reporting of deviations from the permit conditions. San Joaquin Valley APCD District Rule 2520, 9.6.2 is referenced as the corresponding District Rule. District Rule 2520, 9.6.2 addresses the proper use of allowances under the acid rain program. The proper corresponding District Rule is 2520, 9.5.2.*

*Facility-Wide Requirement 12 is the Permit's severability clause. San Joaquin Valley APCD District Rule 2520, 9.8 is referenced as the corresponding District Rule. District Rule 2520, 9.7 is the proper corresponding as it lists the severability clause one of the necessary Permit requirements.*

*Facility-Wide Requirement 16 provides requirements for the furnishing of information to the District necessary for the District's consideration of possible modification, revocation, reissuance or termination of a permit. San Joaquin Valley APCD District Rule 2520, 9.9.5 is referenced as the corresponding District Rule. District Rule 2520, 9.8.5 is the proper corresponding District Rule, as it denotes the same requirements.*

*Facility-Wide Requirements 18, 19, 20 and 21 set out the District's inspection authority. San Joaquin Valley APCD District Rule 2520, Section 9.14, subparts 9.14.2.1, 9.14.2.2, 9.14.2.3, and 9.14.2.4 respectively, are referenced as the corresponding District Rules. There are no such subparts in the 6/21/01 version of the District Rules available on the District's website. Section 9.14 addresses Compliance Schedules. The proper corresponding District Rules are 2520, Section 9.13, subparts 9.13.2.1, 9.13.2.2, 9.13.2.3, and 9.13.2.4 respectively.*

*Facility-Wide Requirement 28 sets out a facility's responsibility to certify reports and documents submitted to the District. San Joaquin Valley APCD District Rule 2520, 9.14.1 addresses Compliance Schedules. District Rule 2529, subpart 9.13.1 is the correct corresponding District Rule.*

*Facility-Wide Requirement 35 lists the requirements needed in a certification of compliance. San Joaquin Valley APCD District Rule 2520, 9.17, which mandates that general permit templates, if used, shall be used without modification, is referenced as the corresponding District Rule. District Rule 2520, 9.16 is the proper corresponding District Rule, as it denotes the requirements for certifications of compliance.*

**District Response:** The section numbers in the draft permit were based on a previous version of District Rule 2520. The numbers will be updated to reflect the current version at the time of final action.

## Title V Facility Contacts

Created On (Date):

1/4/00

For (Facility name):  
(DBA ID Number):

Delano Energy Company, Inc.  
S-75

By (District Staff Person):

Martin Keast

Based on Information Provided by:

Wayne Amer

### Responsible Official

Name:

John Jensen

Title:

Plant Manager

Telephone:

(661) 792-3067

Address

PO Box 1461

Address:

Delano, CA 93216

### Contacts for Questions Regarding Application

Name:

Wayne Amer

Title:

Operations Manager

Telephone:

(661) 792-3067

FAX:

### Send Draft Permits to:

Name:

John Jensen

Title:

Plant Manager

Telephone:

(661) 792-3067

FAX:

Address:

PO Box 1461

Delano, CA 93216

### Send Proposed and Final Permits to:

Name:

John Jensen

Title:

Plant Manager

Telephone:

(661) 792-3067

FAX:

Address:

PO Box 1461

Delano, CA 93216